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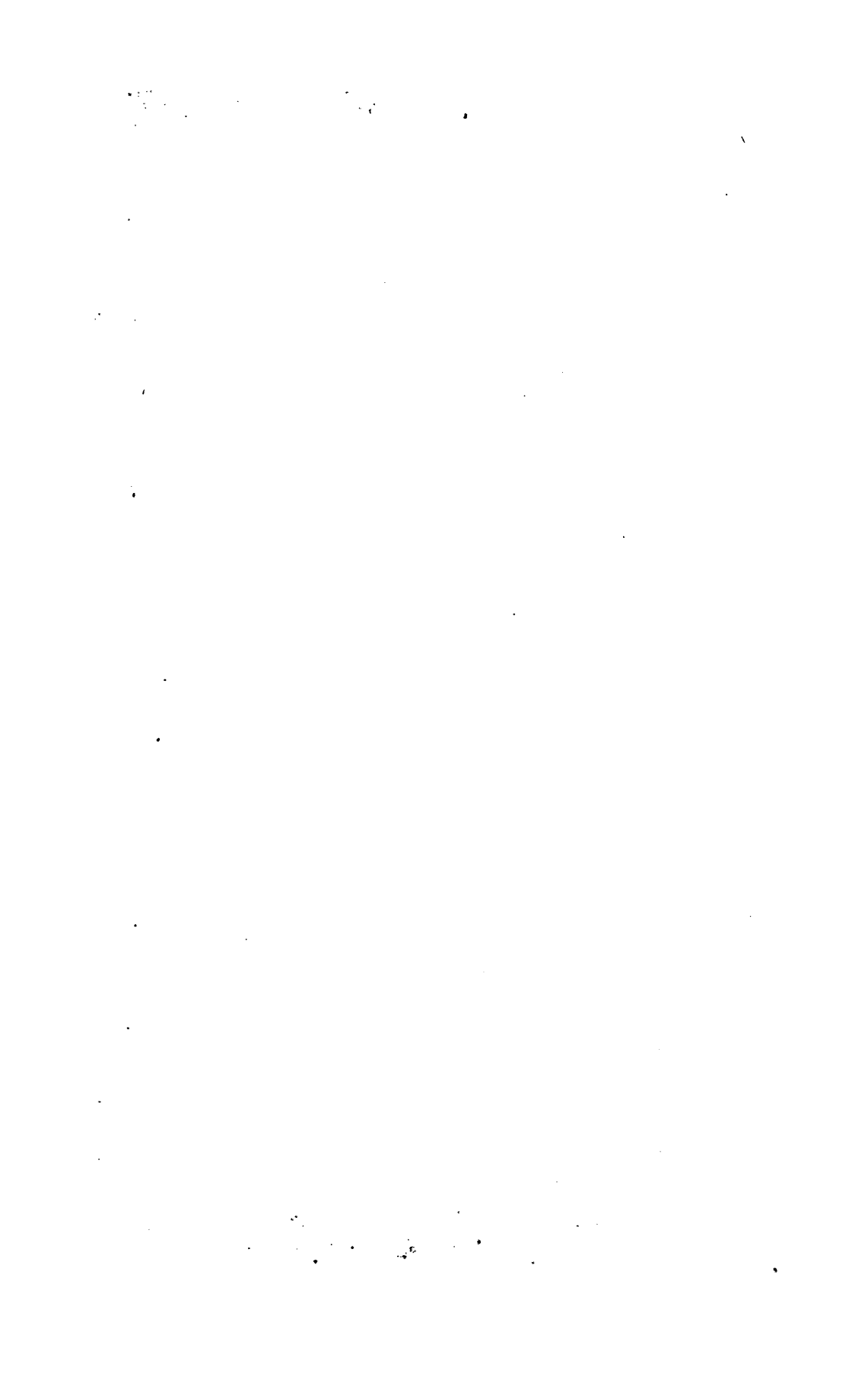
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Samuel Slater

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Samuel Hays

THE
MERCHANTS' MAGAZINE

AND
COMMERCIAL REVIEW.

CONDUCTED BY FREEMAN HUNT,
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VOLUME TWENTY.

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FROM JANUARY TO JUNE, 1849.  
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HUNT'S

MERCHANTS' MAGAZINE

AND

COMMERCIAL REVIEW.

JANUARY, 1849.

Art. I.—THE HISTORY AND PRINCIPLES OF ANCIENT COMMERCE.

LECTURE IV.—PART II.

THE COMMERCE OF ANCIENT ROME.

SLAVERY OF THE ROMANS—INFLUENCE OF DOMESTIC SLAVERY UPON ANCIENT COMMERCE—ROMAN ROADS—TRANSMISSION OF LETTERS—ROMAN BANKERS—MONEY—MARINE INSURANCE—ASSURANCE OF LIVES—COMMERCIAL CHARACTER OF THE ROMANS.

HAVING considered, in the first part of this article, the Romans as an agricultural tribe, a warlike nation, and an extensive empire, I shall now take a view of those institutions which have a connexion with commerce. These are—

First. The institution of domestic slavery.

Secondly. The institutions for the transmission of letters.

Thirdly. Institutions for buying and selling.

Fourthly. The institutions for insuring property.

I. The institution of domestic slavery. The following accounts are given us respecting the domestic slavery of the Romans :—

Men became slaves among the Romans by being taken in war, by sale, by way of punishment, or by being born in a state of servitude. The masters had an absolute power over their slaves. They might scourge or put them to death at pleasure. When slaves were beaten, they were commonly suspended, with a weight tied to their feet that they might not move. When punished capitally, they were crucified. If a master of a family was slain at his own house, and the murderer not discovered, all his servants were liable to be put to death. We find no less than 400 in one family punished on this account. Slaves were not esteemed as persons, but as things, and might be transferred from one owner to another, like any other effect. They could not appear as witnesses in any court of justice, nor make a will, nor inherit anything, nor serve as soldiers, nor was there any regular marriage among them.

The influence of domestic slavery on ancient commerce was exceedingly injurious.

Slavery prevailed more or less in all ancient nations. The lands were cultivated by slaves—the various branches of manufacture were carried on by slaves. Each landlord had an establishment of slaves, whose labor supplied him with most of the articles necessary for his domestic consumption. In some cases, the slaves sold, for the benefit of their masters, the articles they had made. Commerce was carried on chiefly by freed-men, or the inferior class of citizens.

The result of this was that manufacturing labor was looked upon with contempt. In all slave countries there is an aversion to labor, at least an aversion to that kind of labor which is performed by slaves. At the commencement of the Roman state, agriculture was considered honorable, and the greatest of her sons worked at the plough ; but, when agriculture was performed by slaves, the citizens refrained from labor, and Rome imported her provisions from abroad. This change produced disastrous effects. As the poorer citizens could not engage in manual work, they were, when not engaged in war, dependent on the bounty of the state, and received a certain sum for their support. Had not slavery existed they might have become artisans ; but, as slaves were artisans, the citizens became paupers.

But this was not the worst. Had the citizens received with quietness the public bounty, the evil would have been comparatively light ; but wealthy men, who were ambitious of political honors, sought to attain their object by feasting the poorer citizens. Hence, every rich man had the means of keeping constantly in his pay a turbulent party, who would go any lengths in support of the man from whom they derived their subsistence ; and, as they were all soldiers, they were ready to embroil their country in a civil war in support of their patron. It was by means only of his wealth that Crassus obtained the chief honors of the state.

The institution of slavery compelled every citizen to be a soldier. Had no foreign wars been feared, it would still have been found necessary that every citizen should acquire the use of arms, in order to keep down the slaves. A slave country resembles a sleeping volcano—an eruption may take place in a moment—the citizens must be always on their guard. The military spirit which was thus maintained was exceedingly unfriendly to commerce.

Notwithstanding this military spirit, the defensive position of a country is weakened by slavery. In a country where all are free, every man, in case of invasion, will become a soldier : the weaver will leave his loom, the dealer his shop, the husbandman his plough—all fly to arms to fight for their country. But a slave has no country ; it matters not to him who may be the proprietor of the soil on which he is doomed to labor. The slaves cannot be trusted with arms to fight for their masters, because they may turn those arms against their masters.

Again, slaves *consume* less than freemen ; hence the imports of a country will be less. They are not allowed those comforts and luxuries in which, were they free, they would be able to indulge. Slaves also *produce* less than freemen ; hence the exports of a country will be less. It is the interest of a slave to work as little as he can, as his remuneration will be the same ; it is the interest of a freeman to work as much as he can, because his reward is in proportion to his work.

Slavery is an obstacle to improvement in the art of production. People who have laid out large sums of money in the erection of machines, sometimes object to the introduction of new machinery, lest they should diminish the value of the old. So, in slave countries, the proprietors do not introduce machinery, because the value of the slaves will thus be diminished; and the slaves themselves do not invent machinery, nor probably would their invention be adopted if they did. In these respects slavery is injurious to commerce.

II. We will notice those institutions that have a reference to travelling, and the conveyance of letters.

Dr. Adams states that the public ways were, perhaps, the greatest of all the Roman works. They were made with great labor and expense, and extended to the utmost limits of the empire, from the pillars of Hercules to the Euphrates, and the southern confines of Egypt. The first road which the Romans paved was to Capua, afterwards continued to Brundisium, about 350 miles long. It was paved with the hardest flint, so firmly, that in several places it remains entire to this day. It was so broad that two carriages might pass one another. The stones were of different sizes, from one to five feet every way, but so artfully joined that they appeared but one stone. There were two strata below; the first strata of rough stones, cemented by mortar, and the second of gravel, the whole being about three feet thick. The roads were so raised as to command a prospect of the adjacent country. On each side there was usually a row of larger stones for foot passengers. The charge of the public ways was entrusted only to men of the highest dignity. From the principal ways there were cross roads, which led to some places of less note. The inns, or stages along the roads, were commonly at the distance of half a day's journey from each other. At a less distance there were places for relays, where the public couriers changed horses. These horses were kept in constant readiness, at the expense of the emperor, but could only be used by those employed on the public service, without a particular permission, notified to the innkeeper by a diploma. The Romans had no public posts as we have.

The first invention of public couriers is ascribed to Cyrus. Augustus first introduced them among the Romans, but they were employed only to forward political despatches, or to convey intelligence. It is surprising they were not sooner used for the purposes of commercial and private communication. Louis XI. first established them in France in the year 1474; but it was not till the first of Charles II., anno 1660, that the post-office was settled in England by Act of Parliament.

The state of its post-office is, perhaps, in modern times, no bad criterion of the state of knowledge and civilization which exists in any country. Nothing is of more importance to a merchant than a rapid conveyance of letters. It is of importance to him to have the earliest information of any events that may affect his trade—of any change in the markets—of the character or failure of his correspondents—of the payment or non-payment of his bills, of the execution of his orders, or of the despatch of his merchandise. In all modern nations the carrying of letters has been undertaken by the government. It is found that when a large number of letters are despatched at the same time, a moderate charge upon each is not only sufficient to bear the expense of the carriage, but leaves a surplus that affords a considerable revenue to the state.

III. Those institutions that have a reference to buying and selling ; the chief of these relate to money and banking.

The Romans, like other ancient nations, had, at first, no coined money, but either exchanged commodities against one another, or used a certain weight of uncoined brass. The various names of money also denoted weights, in the same way as with us, who now use the word "pound" to denote a coin, whereas it first denoted a pound of silver. Indeed, we have borrowed this practice from the Romans ; and over the figures that denote the pounds, we do not place the letter P., but the letter L.—the first letter in the word *libra*—the Latin word for a pound. The Roman pound was equal to about twelve ounces avoirdupois.

The table of Roman money would stand thus :—

10 *asses* make one *denarius*.

25 *denarii* make one *aureus*.

The *as* was of brass, the *denarius* of silver, and the *aureus* of gold.

All the Roman money was originally of brass ; and hence the word *as*, which in Latin denotes brass, is also employed to denote money. Silver was not coined in Rome until the year of the city 484 ; that is, 269 years before the Christian era,—and gold, 62 years later, or 207 years before the Christian era.

Servius Tullius first stamped pieces of brass with the image of cattle, oxen, and swine. The Latin name for these is *pecudes*, hence, money was called *pecunia* ; from which we derive our word pecuniary. The *as* was a brass coin that weighed a pound. There were other brass coins, weighing one-half, one-fourth, and one-sixth of a pound.

The practice of depreciating the currency, by issuing coins, sustaining the same names as the previous coins, but containing a less quantity of metal, was adopted by the Romans to a greater extent than in our own country. With us, a pound weight of silver that was formerly coined into twenty shillings, is now coined into sixty-six shillings. In the first Punic war money became so scarce that the Romans coined *asses* that weighed only two ounces, or the sixth part of a pound, which passed for the same value as those of a pound weight had done ; by this means the republic gained five-sixths, and thus discharged its debts. Such an example could not fail to have imitators among succeeding statesmen. In the second Punic war, while Fabius was dictator, the *asses* were made to weigh only one ounce, and subsequently they were reduced to half an ounce.

The *denarius* was of silver. The Romans had three silver coins—the *denarius*, the *quinarius*, and the *sestertius*. The first was equal to ten *asses*, that is, to ten pounds of brass ; the second, to five *asses* ; and the third, to two *asses* and a half.

A pound of silver was coined into a hundred *denarii* ; so that, at first, a pound of silver was equal to a thousand pounds of brass, a circumstance which proves that silver was then comparatively scarce. But afterwards the case was altered ; for, when the weight of the *as* was diminished, it bore the same proportion to the *denarius* as before, till it was reduced to one ounce, and then a *denarius* passed for sixteen *asses*. The weight of the silver money also varied, and was different under the emperors from what it had been under the republic.

We translate the word *denarius* by the word penny, and over figures denoting pence we put the letter D., being the first letter in the word

denarius, the Latin for a penny. But the Roman penny was not made of copper, nor of brass, but of silver, and, at the time of the Christian era, was worth about sevenpence-halfpenny of our money. We learn from the New Testament history, that the Roman penny bore the image and superscription of the emperor, and was used in the payment of taxes; that it was the usual wages for a day's labor; and that twopence would provide a night's entertainment at a public inn.

The *aureus* was of gold. It was first struck at Rome in the second Punic war (207 years before the Christian era,) and was equal in weight to two and a half *denarii*, and in value to twenty-five *denarii*, or one hundred *sestertia*. The common rate of gold to silver, under the republic, was tenfold. At first, forty *rurei* were made from a pound of gold; but, under the later emperors, they were mixed with alloy, and thus their intrinsic value was diminished.

Among the Romans, money was computed by *sestertium*. A *sestertium* was the name of a sum, not of a coin, and was equal to a thousand of the coins called *sestertius*. A *sestertius* is equal in English money to one penny, three-farthings, and three-fourths of a farthing.

The system of banking at Rome was somewhat similar to that which is in use in modern times. Into these institutions the state or the men of wealth caused their revenues to be paid, and they settled their accounts with their creditors by giving a draft or cheque on the bank. If the creditor also had an account at the same bank, the account was settled by an order to make the transfer of so much money from one name to another. These bankers, too, were money-changers. They also lent money on interest, and allowed a lower rate of interest on money deposited in their hands. In a country where commerce was looked upon with contempt, banking could not be deemed very respectable. Among most of the ancient agricultural nations, there was a prejudice against the taking of interest for the loan of money. Hence, the private bankers at Rome were sometimes held in disrepute, but those whom the government had established as public cashiers, or receivers-general, as we may term them, held so exalted a rank, that some of them became consuls.

The Romans had also loan banks, from which the poor citizens received loans without paying interest. We are told that the confiscated property of criminals was converted into a fund by Augustus Cæsar, and that from this fund sums of money were lent, without interest, to those citizens who could pledge value to double the amount. The same system was pursued by Tiberius. He advanced a large capital, which was lent for a term of two or three years to those who could give landed security to double the value of the loan. Alexander Severus reduced the market-rate of interest, by lending sums of money at a low rate, and by advancing money to poor citizens to purchase lands, and agreeing to receive payment from the produce.

The deity who presided over commerce and banking was Mercury, who, by a strange association, was also the god of thieves and of orators. The Romans, who looked upon merchants with contempt, fancied there was a resemblance between theft and merchandise, and they easily found a figurative connection between theft and eloquence, and hence, thieves, merchants, and orators were placed under the superintendence of the same deity. On the 17th of May in each year the merchants held a public festival, and walked in procession to the temple of Mercury, for the purpose,

as the satirists said, of begging pardon of the deity for all the lying and cheating they had found it convenient to practise, in the way of business, during the preceding year.

IV. Those institutions that have a reference to insurances.

The Romans are said to have introduced the practice of the insurance of ships. This is of the highest importance to a nation having many ships. If a register were kept of all the ships engaged in any particular trade, and a record of all those which, during a certain period, had been wrecked, it would be easy, after a time, to construct a table showing what premiums an owner ought to pay to any party who would insure his ship. If the ship is not lost, the insurers have the premiums as their profit, as pay for the risk they have ran; if the ship is lost, the insurers pay the value to the owner; and thus, a loss that might ruin an individual, becomes divided among a number of parties, who can better afford it. Now, such registers are kept, and this kind of business is extensively carried on in most large maritime cities. You have heard of the underwriters at Lloyds. The underwriters are marine insurers. If a person wishes to insure his ship, he submits all the particulars of the ship, the voyage, and the cargo, to these parties, and each individual *under writes* his name and the amount to which he is disposed to insure. To a maritime nation, this practice is of high importance.

The principles of life insurance are the same as those of marine insurance. You must first get a record of the number of persons that die, out of a certain population. These records are called "bills of mortality," and from these are constructed "tables," showing how long a person of any given age is likely to live; this term is called the "probability of life." Having obtained this, you can easily calculate how much a year he ought to pay during his life to entitle his executors to receive £1,000, or any other sum, at his death, taking into account the rate of interest at which these annual payments are presumed to accumulate, and the profits to be made by the party who grants the insurance.

We are not aware that any of the nations of antiquity kept a register of the births and deaths, so as to form the foundation of tables of mortality sufficiently minute for the purposes of life assurance. Such tables are of very modern date even in our own country. The oldest tables we have are the Northampton, calculated by Dr. Price, from the bills of mortality in the town of Northampton. There is an easy rule by which any of you may know the probability of your own lives, according to the Northampton tables:—Take your own age from the number 86, divide the remainder by 2, and that will give the probability of life. Thus:—Suppose you are now 20 years of age; take 20 from 86, that leaves 66; divide 66 by 2, and you have 33, which is the probable number of years that you will live—it is the average duration of life of persons of your age.

Three new facts have recently been discovered in the science of life insurance. First, that people live longer now than they did a century ago. Secondly, that the wealthy classes live longer than the indigent. Thirdly, that ladies live longer than gentlemen.

People live longer now than they did a century ago:—By this it is not meant that the extreme of life is prolonged, but that few people die at an earlier age. Thus, if we compare the Carlisle and the Northampton tables, we shall find the following results:—

					Northampton.	Carlisle.
At 66 years of age, the expectation of life is.....	years				13	14
50	"	"	"	"	17	21
40	"	"	"	"	23	27
30	"	"	"	"	28	34
20	"	"	"	"	33	41

And, at birth, the expectation of life by the Northampton tables, is 25 years, and by the Carlisle tables, 38. Thus, the difference between the two tables, at 60 years of age, is only one year, and on the day of birth it is 13 years. So people do not live to a more advanced age now than some persons did a hundred years ago, but fewer die young. This improvement in the expectation of life, is the result probably of increased regard to cleanliness on the part of the poor, to increased attention paid to the public health, to the improvements in medical science, and particularly to the discovery of vaccination. This increased prolongation of life is not confined to England. In France, it has been estimated that the value of life has been doubled since the fourteenth century, and has gained nearly one-third since the year 1781.

Another new fact connected with life assurance is, that the wealthy classes live longer than the indigent. Although the late hours, the crowded assemblies, and the variety of indulgencies enjoyed by the wealthy must be considered unfavorable to longevity, yet, on the other hand, they are exempt from the evils of want, from the scarcity of food, and from the anxieties of business. If unwell, they have the best medical advice, and can immediately remove to any part of the country that is more friendly to their recovery. Hence, the lives of the rich are better than those of the poor.

Though females are exposed to some contingencies from which men are exempt, yet, from being more free from dangerous employments, and from cares and anxieties of mind, and, especially, from being more temperate in the use of wine and ardent spirits, they live longer than men. A medical writer has pleasantly remarked, that one cause of the superior longevity of women may be, that they talk more; talking, by exercising the lungs, being exceedingly beneficial to health.

The original object of life insurance was to enable a person to secure to his family the receipt of a certain sum at his death. But it is now applied also to a variety of commercial purposes. Some people insure the lives of their debtors, others insure their own lives for the benefit of their creditors. In every form, the system seems to produce unmingled good. It promotes habits of forethought and economy on the part of the insured, and tends, by the accumulation of savings, to increase the amount of the national capital.

We may reasonably expect that this system will be extended and improved. We may hereafter have tables that shall show the expectation of life, not only in regard to people in health, but also to those afflicted with every kind of disease; and shall also show the effect of different occupations and localities on the duration of life. The system of insurance may be applied to every calamity, as soon as we have tables that will show correctly the probability of its occurrence. We thus find, that the study of statistics, the least inviting in appearance of all the sciences, has produced most important benefit; and that even Death, capricious as he seems, may have his course previously marked out by the hand of Science.

We have thus, in our present lecture, considered Rome as an agricultural tribe, a warlike nation, and an extended empire. We have also taken a view of some of her social institutions that have a reference to domestic slavery, travelling and the conveyance of letters, money and banking, and marine insurances.

We shall now bring under your notice the commercial character of the Romans.

1. The Romans were honorable men.

However strongly we may condemn the spirit of war, we must not suppose that the profession of arms is incompatible with personal excellence of character. We read, in the New Testament, of an officer in the Roman army who was "a devout man, and one that feared God, with all his house, who gave much alms to the people, and prayed to God alway"—whose "prayers were heard, and whose alms were had in remembrance in the sight of God." And, in the same book, we have a confirmation of the honorable character of the Roman law, which was very different from that which prevailed among Asiatic nations. "It is not the manner of the Romans to deliver any man to die, before that he which is accused have the accuser face to face, and have license to answer for himself concerning the crime laid against him."

A merchant should be an honorable man. Although a man cannot be an honorable man without being an honest man, yet a man may be strictly honest without being honorable. Honesty refers to pecuniary affairs; honor refers to the principles and feelings. You may pay your debts punctually, you may defraud no man, and yet you may act dishonorably. You act dishonorably when you give your correspondents a worse opinion of your rivals in trade than you know they deserve. You act dishonorably when you sell your commodities at less than their real value, in order to get away your neighbor's customers. You act dishonorably when you purchase at higher than the market price, in order that you may raise the market upon another buyer. You act dishonorably when you draw accommodation bills, and pass them to your banker for discount, as if they arose out of real transactions. You act dishonorably in every case wherein your external conduct is at variance with your real opinions. You act dishonorably if, when carrying on a prosperous trade, you do not allow your servants and assistants, through whose exertions you obtain your success, to participate in your prosperity. You act dishonorably if, after you have become rich, you are unmindful of the favors you received when you were poor. In all these cases there may be no intentional fraud. It may not be dishonest, but it may be dishonorable conduct.

2. The Romans were patriotic men. They loved their country, and a merchant should love his country. When we say that a merchant is a citizen of the world, and is free from national prejudices, think not we mean that a merchant has no attachment to his country; think not we mean, that the land of his forefathers—the land in which his ancestors lived and acted, and in which their ashes now repose—the land which gave him birth, and the land of his earliest associations—the land, under the laws of which he has acquired wealth, and in whose institutions he participates—the land, the language of which awakens the sweetest and the holiest associations;—think not we mean that he regards this land with no sentiments of filial regard,—no feelings of preference,—no aspirations for her honor and prosperity. No! 'tis a false philosophy that

would tell us to merge all individual or local attachments in one general feeling of philanthropy. He who has no personal attachments, has no general attachments. He who does not love his country has no love for mankind. Local attachment is the basis of general attachment. He who is the best husband, the best father, and the best friend, he it is that will make the best philanthropist. While, therefore, a merchant is free from that littleness of mind which would induce him to despise other nations, he is still susceptible of all the delightful sensations that arise from pure and disinterested patriotism. He should love his country too well to encourage the industry of other countries to the injury of his own. He should pay those taxes or duties which the laws of his country have imposed for the public good. He should readily serve those offices in the commonwealth, though burdensome or expensive, which his station in society impose upon him. He should use his influence in preserving order, in maintaining the rights of property, and in upholding the supremacy of the law. He should liberally support those institutions that have for their objects the preservation of the public morals, the diffusion of useful knowledge, and the relief of the distresses of the poor. Ah! it is here that patriotism gathers her sweetest and her softest laurels,—laurels which will give composure to the head that wears them, and which will maintain their freshness when the blood-stained garland of the conqueror shall have faded into insignificance, or have withered into oblivion.

3. The Romans were grave, methodical, and systematic men.

They conducted everything upon system. They owed their success in arms to their superior discipline. They maintained their dominion by acting upon certain fixed principles, and by the uniformity with which they adhered to those principles. Rome was not built in a day. The Roman empire was not the result of one daring enterprise, one bold speculation, one grand achievement,—it was the result of adhering for centuries to fixed rules of action. The sons adopted the maxims of their fathers, and generation after generation followed up those principles which experience had shown to be adapted to the end in view. This may teach us some important commercial lessons. A nation, a company, or an individual, who shall for a length of time adhere inflexibly to sound rules of conduct, will seldom fail of success. The road to wealth is a beaten road, and it requires but ordinary sagacity to discover the path. Industry, honesty, prudence, and perseverance, these are the finger-posts that will direct your steps; follow their guidance, and the end will be gained. But you who disregard the counsels of experience—you gratify your love of self-indulgence—you nourish the spirit of speculation—you stray from the right path, and meddle with matters that you do not understand—and when you have reaped the fruit of your own doings, then you tell your creditors that you have been “unfortunate;” and the hard earnings of their honest industry are swept away, and their families are pinched in their enjoyments, because you have thought proper to follow a course of unprincipled recklessness.

A merchant should not only be systematic in his adherence to right principles, he should also be so in the details of his counting house. In everything, system is essential to a merchant. He should be systematic in the arrangement of his business, systematic in the division of his labors, systematic in the keeping of his books, systematic in the employment of his time. By system, he saves much time, avoids hurried feelings, and

gets through much more work. I do not think the better of a merchant if I see him always in a hurry ; if he tells me he received my letter, but was so hurried that he had not time to answer it, or that he put it somewhere among his papers, and when he wished to answer it he could not find it. A man who acts systematically will arrange his business beforehand, and thus find time to do it all.

4. The Romans were not loquacious men. They were much inferior to the Greeks in vividness of imagination and in affluence of speech. I do not, by any means, intend to recommend taciturnity in general company. Conversation is one of the means by which knowledge is communicated, and the character of mankind is improved. As rough diamonds become smooth by being shaken together in a bag, so the asperities of men are softened down by their intercourse with each other. But it adds nothing to the character of a merchant, to make use of many words in matters of business ; this argues either great indecision of character, or great prodigality of time. Time is money ; talk as much as you please when you have nothing else to do, but don't talk more than is necessary until your business is done. The late Mr. Wesley, the venerable founder of the body of the Wesleyan Methodists, a body who have done much good in educating the poor, laid it down as one qualification for admission into his society, that the candidate should not use many words in buying and selling. A most excellent rule, and one which, if steadily adhered to, would save much time, and produce other good effects.

Not only should you avoid many words in commercial conversation, you should also avoid too many words in your commercial correspondence. Long letters on matters of business are exceedingly tiresome. Let all your letters be as short as the subject will admit. Come at once to the point, express your meaning clearly in a few plain words, and then close. The man who introduces a variety of unnecessary circumstances, who is fond of using tropes and figures of speech, or has a lengthy, prosy style, is very ill qualified to conduct the correspondence of a commercial establishment. You ought also to be careful to write a plain hand ; you impose upon your correspondents a very unnecessary and a very unpleasant tax, if you require them to go over your letters two or three times in order to decipher your writing. It is presumed, that when you write a letter, you write for the purpose of communicating your ideas to the person to whom the letter is addressed ; why, then, throw difficulties in the way, by writing in an illegible hand. A business hand is equally opposed to a very fine hand. A letter written in fine, elegant writing, adorned with a variety of flourishes, will give your correspondents no very high opinion of you as a man of business. Some persons have contended that a man's character may be discovered by his hand-writing. It may be doubted whether a man's intellectual powers can be ascertained in this way, but perhaps his moral qualities may thus be sometimes exhibited. For instance, if he write an illegible hand, it may be inferred that he is not very anxious about the comfort of the parties to whom he writes.

5. The great defect in the commercial character of the Romans was their military spirit.

In every age of the world military men have looked upon merchants as a class vastly inferior to their own. And this will always be the case, so long as mankind shall pay more respect to the arts of war than to the arts of peace. But it is more surprising, that merchants themselves, instead

of forming more correct notions of their own importance, have fallen in with the popular prejudice, and aped the manners of the military class. Hence, we find that merchants have sometimes settled their disputes with each other by duelling. That military men should do this may excite no surprise. Though, when we consider, that among the heroic Greeks and the martial Romans the practice of duelling was unknown, it can never be contended that this practice is necessary to maintain the personal courage of our military officers. On this ground we might also permit duelling among the common men. But if military men, when they have none of their country's enemies to shoot, wish to keep themselves in practice by shooting one another, they may allege that they are acting according to the principles of their profession. But nothing can be more out of character than for a mercantile man to be engaged in a duel. When a case came before the late Lord Ellenborough, in which one merchant had attempted to provoke another to fight a duel, his lordship observed, that merchants would be much better employed in posting their books than in posting one another.

One effect of the military spirit is, that it leads to cruelty of disposition. The Romans were cruel men, cruel towards their slaves, cruel towards their conquered enemies, cruel in their punishments, cruel in their amusements. No disposition is more opposed than this to the spirit of commerce, and yet, on some occasions, merchants have become the instruments of cruelty. Is there nothing cruel in selling spirituous liquors to half-civilized nations?—nothing cruel in supplying the munitions of war to untutored tribes who would otherwise remain at peace?—and was there nothing cruel in the African slave trade—a traffic that must be numbered among the blackest of our country's crimes, the most crimson of our national sins? Merchants should not only act honestly in their trade, but should also ascertain that the trade itself is an honest trade. For, although it be true, upon the ordinary principles of profits and loss, that honesty is the best policy, yet we should not practise honesty solely from motives of policy, nor infer the honesty of an enterprise from its apparent policy. Beware of taking a mere commercial view of questions of morality. Crimes the most atrocious have sometimes been profitable. But you see not the whole of the balance sheet. There are items in the account which no arithmetic can express. What estimate will you place upon infamy of character, remorse of conscience, the retributive justice of God in the present life, and his vengeance in the next? Take these into your calculation, and then sum up the amount of your gains.

As commerce extends her sway, the military spirit may be expected to subside, and peace and equity prevail. Commerce will teach mankind that it is their interest to live at peace with each other. Commerce will teach the slave owner that the man who keeps in bondage his fellow man, sins no less against his own interest than against the feelings of humanity and the injunctions of religion. Commerce will show to those who "sit in high places," that the vulgar maxim, "honesty is the best policy," is as applicable to the affairs of communities, as to the transactions of individuals, and that what is morally wrong can never be politically right. Commerce will inculcate upon nations, that the prosperity of one people is not an injury, but an advantage to the others; that national greatness can arise only from superiority in industry and in knowledge; and that nations, like individuals, should seek each other's welfare, and endeavor to promote

universal peace. When these sentiments are acknowledged, the Demon of national discord will be driven from the earth—the clangor of arms, and the shrieks of the vanquished, will be heard no more—and the Genius of War, in his dying moments, will surrender the palm of victory into the hands of Commerce.

ART. II.—MEMOIR OF SAMUEL SLATER,

THE FATHER OF AMERICAN MANUFACTURES.

[WITH A PORTRAIT.]

THERE is no individual deserving a more honored perpetuity in American annals than the one named above. True, he had no far back ancestry, as common in the land of his birth, to nourish a silly pride. Heraldry had no laurels to encircle him. The dazzling splendors of a court had never cast their lustre upon him. Nor is it known that he could cast an eye of complacency on any one of his own blood who had been particularly distinguished in the army, the navy, or the church. No, that blood had descended through successive generations—not by inundating floods and over lofty precipices, to arrest the gaze and call forth the acclamation of impulsive multitudes; but in limpid streams, noiseless and gentle, through the deep mountain passes, till the alluvial plains below were made rich and verdant by their fertilizing agency. His father was a respectable yeoman of Belper, Derbyshire county, in a central part of England. The yeomanry of that country form a distinct class, farming their own lands, ordinarily possessing wealth competent for their own necessities; being a desirable mediocrity in society, equally removed, on the one hand, from all in scouted and unmitigated poverty that is degrading and paralyzing; and, on the other hand, from sudden overgrown riches and unnatural rank in social position.

Verily it is no easy matter to write the biography of such a man as Samuel Slater; we mean to write one that will be generally read in a community like ours. It is not denied that we are a business kind of people, proverbially philosophical and shrewd in all matters connected with the acquisition of property; yet, few indeed think of reading the life of a business man. If urged to do it, the response will be interrogatories like the following:—What has he done that is memorable or calculated to interest mankind? Has he made any brilliant discoveries in science? Has the telescope opened to his enraptured vision hitherto undiscovered planets? Have the laboratories of the chemist enabled him to spread upon some broad and distinct panorama new analyses and combinations, and, as it were, new principles in the government of physical nature? Or, has he fought the battles of his country and clothed himself with martial glory? We cannot answer in the affirmative. We admit, that usually in the life of a business man there is not to be expected much incident to arrest the attention of the sleepy and the dull. If he has acquired great wealth; if at home he gives constant employment and consequent subsistence, year after year, to hundreds or to thousands of mechanics and laborers; if, too, the virtuous poor are furnished by him with comfortable

habitations, at rates the most reduced and advantageous ; and, if abroad the canvass of his ships whiten every sea, and the merry notes of his gallant tars enliven every port in the known world ; nevertheless his career has been comparatively uniform and monotonous—nothing in it stirring and dazzling, unless it be the grand result, the acquisition of a princely fortune. If now and then a rich cargo, amidst the howling tempest and the upturned elements, sink into the ocean's deep abyss ; or if a conflagration in the dark hour of midnight sweep away whole blocks of houses and stores ; these are deemed commonplace occurrences, scarcely deserving recollection. Whatever public sympathy may exist tends to another point. The tenants in being thus frightfully driven from their habitations by the flames bursting in upon them ; and the mariners also in struggling for life, when shipwreck deprives them of food and all rational means of safety, do indeed excite a deep sympathy, and a memoir of their perilous sufferings would be read by thousands ; while the owner of the wasted property is not mentioned or thought of, except by a few personal friends and the insurance offices.

Such are the natural reflections in reference to the biography of a merchant. However, the case of Samuel Slater is somewhat different. For if he hath not like Fulton discovered a new application of principle which has completely changed the social and business relations of the whole world, he has, no one can deny, introduced from a foreign land into our own country and spread over its fair bosom the application of a principle that has already, as with the power of magic, resolved population and wealth into new combinations. What has made the city of Lowell ? What is now making the city of Lawrence become a rival sister to her ? What has cast the germ of an hundred cities, here and there, all about us in every direction, at present flourishing villages, where only a few years since was a dense forest, the stillness of which has given place to the multitudinous hum of business ? The reader scarcely need be told. With the young the story has become a kind of instinct. The hammer and the file of the machine shop, the dizzy whirl of the yarn spindle, and the rattling of the weaver's shuttle, answer the question. Spinning by machinery has mainly done all this. For a moment imagine these germs never to have been thus spread broadcast over our country, and what should we now behold ? The answer is obvious. Our wheels of improvement would be set backwards half a century. So far as depending on this portion of our industry is involved, the geographies, the printed statistics, the newspapers printed sixty years ago would tell you with startling accuracy what would now be our condition.

The limits assigned for this article do not admit of much generalizing. They scarcely admit a well connected view of the prominent facts in the life of the individual immediately claiming our attention. He was born June 9th, 1768. We have already alluded to his father, who being in comfortable circumstances, the son received the advantages of a common school education. When at school, he is said to have evinced an inquisitive mental aptitude, for which he was so much noted in subsequent life. With him arithmetic was a favorite branch of study. This conduced to the development of mechanical capabilities, that were the foundation of his principal success through life. And it is justice to remark, that he was indebted only in a small degree for this success to any other cause save intellectual vigor and the most rigid integrity. He was modest and diffi-

dent, which with sensible people always command esteem ; and was completely destitute of that flippancy and bold pretension, which with many appear to be a substitute for genius. It is doubted if he was ever known to profess knowledge he did not possess, or to control means of any kind unless apparently within his power. We have frequently heard him affirm, that it was his *habit* through life, and especially in the early portion of it, not to assume pecuniary responsibilities, without calculating at the time the source from which funds would be received to cancel them. This is a trait of character the more to be admired from the rarity of its existence ; and a man who possesses it would not be inclined to commence, or to profess an ability to complete a machine, unless he had the perspective powers, that from the beginning would enable him at one glance to survey all its constituent parts. Instances indeed occurred, almost as a matter of course, of failure to receive anticipated means ; but, the man who exercised such a habit would not remain long without providing new estimates for the redemption of his responsibilities.

It is probably known to our readers that spinning cotton by machinery, in the boyhood of young Slater, was in its infancy. Richard Arkwright, born in 1732, and brought up to the humble trade of a barber, when about 25 years of age turned his attention to machinery—first, we believe, to an attempt for perpetual motion, and then to the object which has immortalized his name, and given benefits to the world of value surpassing all calculation. He soon obtained a patent for spinning cotton and went successfully into the business. In 1771, Jedediah Strutt, the inventor of the machine for making ribbed stockings, formed a copartnership with Arkwright. Four years afterwards, Mr. Strutt began, on his individual account, the erection of cotton works at Belper, the residence of the Slater family. This prepared the way for the eventful career of young Slater, who, when at the age of fourteen years, became the apprentice of Mr. Strutt, to learn this business ; and, by his father's consent, who died about that time, he bound himself with a regular indenture to perform faithfully the customary duties of an apprentice. Who would have then imagined that such a stripling, by this act, laid the foundation for a large fortune in America, and introduced the elements of a business to employ, in his own life-time, probably more than a million of people ! It seems more like fancy than reality. What conqueror ever produced a revolution in human society so wide and permanent in its character, as that we are contemplating ! A few such boys, each with a corresponding concatenation of circumstances, would revolutionize the whole world.

The signature of young Slater to his indenture, bears a striking resemblance to that written forty years afterwards on the bills of the bank of which he was the president. True, one was the chirography of a boy just from school, and the other of a man of business, and a good penman ; but no one can fail to observe the similarity. To us, this voluntary surrender of himself to Mr. Strutt, under all the legal technicalities in such instruments, is an interesting incident in his life, and was the result of views more comprehensive and collected than is usual with persons of his age. Were it convenient we would give a fac-simile of the indenture, still preserved in the family as a cherished relic of his early life. Just as the world was opening upon him with all its gaudy fantasies, its sensual delights, and its subtle delusions ; when the passions were ripening into full vigor, and the imagination was rampant ; what an idea for a self de-

votion of seven years to the interests and the will of another, with all possible entrenchments against idleness, extravagance, negligence in the care of property, and especially all improper indulgences in pleasure ! It would be well if such cases were characteristic of the present age. Such, however, is not the fact. At the present day the lovely period of youth, in effect, is nearly obliterated from the annals of human life. Youth, in all its exterior attributes, is naturally lovely, no one can deny. The countenance is blooming like the flowers of spring. The physical proportions are symmetrical, and the motions are elastic and graceful. And what is far more important, the mind is disposed to receive instruction with a filial submission to authority, whether in age or position. We have sometimes lamented that this charming period of human existence, in olden times so distinguished, had not continued longer. Yet, now-a-days, both boys and girls, with one long stride, are prone to pass instantanously from childhood to precocious manhood and womanhood ; to assume positions and to exercise functions, as inappropriate and unbecoming, as would be to a dwarf the garments of a giant.

Nor was his new relation an unmeaning formality. He entered fully into the spirit of it. In no one instance is he known to have given cause for complaint. He served his master as faithfully as he was ever afterwards accustomed to regard his own interests. The hours, too, designed for rest and recreation were, to a considerable extent, occupied in experiments on machinery. Such was his fidelity, and so successful were his preliminary efforts in mechanical skill, that he soon became a favorite with Mr. Strutt, and was placed in situations of the utmost importance. Four or five of his last years he acted as an overseer, which with his close habits of observation was of great advantage to him.

But while serving his master faithfully, his mind was active in reference to his own establishment in business when the proper period should arrive. For some time previous to the termination of his apprenticeship, he had thoughts of locating himself in America. This, however, was a secret confined to his own bosom. Had he remained in England, he would unquestionably with less toil and painful anxiety have acquired a fortune ; for it is well known that his knowledge of the business, and his peculiar habits of application, would have secured him all needful encouragement. After he left, Mr. Strutt declared that had he known his intentions, nothing should have induced him to part with him. But Mr. Slater apprehended that in his native country the business would be overdone ; and from some advertisements in American papers, and from various rumors and reports that reached him, he concluded, and very justly, that there was an entire destitution of the talent which he possessed. Accordingly, he resolved that he would perfect himself as much as possible for the enterprise, and then make a bold and determined effort for its successful termination.

Having made all necessary preparation, secretly and without divulging his plans to a single individual, he bid farewell to the home of his childhood. His friends in the land of his adoption well know that he sincerely and ardently loved his mother, and that to all his family he was kind and affectionate ; they well know he could not have left them without a painful struggle ; but a youthful ambition animated his soul and enabled him to overcome his emotions. While waiting in London until the vessel was ready, he wrote to his friends, informing them of his purposes. The

eventful day of departure was September 1st, 1789, being at that time only a few months over twenty-one years of age. The laws of England did not admit the emigration of machinists, and therefore he took with him no patterns or drawings, trusting solely to the powers of his memory to enable him to construct the most complicated machinery. But few men could have done this. His memory however was remarkably tenacious, and being a good mathematician, he was enabled to enter into all the nice calculations required in such a labor. It is true he had many perplexities in his way, and many difficulties to encounter, but his skill and perseverance were a sufficient guaranty. No one unacquainted with the nature of them can understand how much talent and resolution were requisite. It must be apparent that he had not only to prepare all the plans in the several departments of the process of manufacturing, but he either had to make with his own hands the different kinds of machinery, whether of wood, iron, brass, tin, or leather, or else teach others to do it. At that period the business in all its ramifications was new in the country. Thus he must have been skilled in several trades, in addition to that in which he had been particularly instructed.

Mr. Slater arrived in New York the latter part of November, 1789, after a tedious passage of sixty-six days. He had no letters of introduction, excepting his indenture. With this he made himself known; and soon after his arrival he made a temporary engagement with the New York Manufacturing Company. But the state of their business being low and inferior, compared with what he had been accustomed to in his own country, he was soon dissatisfied with his prospects. Besides, he did not like the water privileges shown to him in that section of the country. Hence, on learning that attempts were being made at Providence, Rhode Island, for manufacturing cotton by machinery, after a short correspondence with the venerable Moses Brown, he left for that place early in 1790. Here was soon perfected the preliminary arrangements for business, and the following document presents the details of it, being a most interesting fragment in the early history of the business in America:—

“The following agreement, made between William Almey and Smith Brown of the one part, and Samuel Slater of the other part, witnesseth that the said parties have mutually agreed to be concerned together in, and to carry on, the spinning of cotton by water, (of which the said Samuel professes himself a workman, well skilled in all its branches,) upon the following terms, viz:—that the said Almey and Brown, on their part, are to turn in machinery, which they have already purchased, at the price they cost them, and to furnish materials for the building of two carding machines, viz: a breaker and a finisher; a drawing and a roving frame; and to extend the spinning mills, or frames, to one hundred spindles. And the said Samuel, on his part, covenants and engages to devote his whole time and service, and to exert his skill according to the best of his abilities, and have the same effected in a workmanlike manner, similar to those used in England, for the like purposes. And it is mutually agreed between the said parties, that the said Samuel shall be considered an owner and proprietor in one-half the machinery aforesaid, and accountable for one-half the expense that hath arisen, or shall arise, from the building, purchasing, or repairing of the same, but not to sell, or in any manner dispose of any part or parcel thereof to any other person or persons, excepting the said Almey and Brown; neither shall any others be entitled to hold any right, interest, or claim in any part of the said machinery, by virtue of any right which the said Slater shall or may derive from these presents, unless by an agreement, expressed in writing, from the said Almey and Brown, first had and obtained—unless the said Slater has punctually paid one-half of the cost of said

machinery, with interest thereon ; nor then, until he has offered the same to the said Almey and Brown, in writing, upon the lowest terms, that he will sell or dispose of his part of the said machinery to any other person, and instructed the said Almey and Brown, or some others by them appointed, in the full and perfect knowledge of the use of the machinery and the art of water spinning. And it is further agreed, that the said Samuel, as a full and adequate compensation for his whole time and services, both whilst in constructing and making the machinery, and in conducting and executing the spinning, and preparing to spin upon the same, after every expense arising from the business is defrayed, including the usual commissions of two and a half per cent for purchasing of the stock, and four per cent for disposing of the yarn, shall receive one-half of the profits, which shall be ascertained by settlement from time to time, as occasion may require ; and the said Almey and Brown the other half—the said Almey and Brown to be employed in the purchasing of the stock, and disposing of the yarn. And it is further covenanted, that this indenture shall make void and supersede the former articles of agreement, made between the said Almey and Brown and the said Slater, and that it shall be considered to commence, and the conditions mentioned in it be binding upon the parties, from the beginning of the business ; the said Samuel to be at the expense of his own time and board thenceforward. And it is also agreed, that if the said Almey and Brown choose to put apprentices to the business, that they have liberty so to do ; the expense arising from the maintenance of whom, and the advantages derived from their services during the time the said Almey and Brown may think proper to continue them in the business, shall be equally borne and received as is above provided for in the expenses and profits of the business. It is also to be understood, that whatever is advanced by the said Almey and Brown, either for the said Slater, or to carry on his part of the business, is to be repaid them with interest thereon, for which purpose they are to receive all the yarn that may be made, the one-half of which on their own account, and the other half they are to receive and dispose of on account of the said Slater, the nett proceeds of which they are to credit to him, towards their advance and stocking his part of the works, so that the business may go forward.

“In witness whereof, the parties to these presents have interchangeably set their hands, this fifth day of the fourth month, seventeen hundred and ninety.

“WM. ALMEY,
“SMITH BROWN,
“SAMUEL SLATER.

“Witnesses } OZIEL WILKINSON,
 } ABRAHAM WILKINSON.”

On the 21st of December, 1790, Mr. Slater started three cards drawing, roving, and seventy-two spindles, which were operated by an old fulling-mill waterwheel in a clothier's shop at the west end of Pawtucket bridge. In this place they continued the spinning until the subsequent erection, early in 1793, of what is called in that village the “Old Mill,” and which is believed to be still in existence. It has been remarked that Mr. Slater had many perplexities ; and although he had full confidence in his ability to complete what he engaged to perform, yet the pressure upon his mind occasionally would seem to overpower him. In addition to the burden of carrying in his memory all the plans and calculations of such complicated machinery, required in the several departments of the business, which is seemingly what no other mortal could do, the necessity, for the want of competent artisans, of performing so much of the labor with his own hands, occasioned unexpected delays. This at times nearly discouraged his partners. Of this he became aware ; a circumstance adding much to other causes of solicitude. There is told of him a curious anecdote connected with the history of his first machinery ; and, whether true or fictitious, it may be preserved for the edification of Messrs. Upham,

Abercrombie, Macknish, and other inquirers into the philosophy of dreams. When the day arrived for putting his machinery in motion, great was the joy of the artist and his associates ; but, unluckily, it would not move, or at least it would not move as intended, or to any purpose. The disappointment was all but overwhelming to him. Day after day did he labor to discover, that he might remedy the defect ; but to no purpose. But what he could not discover waking was revealed to him in his sleep. It was perfectly natural that the subject which engrossed all his thoughts by day, should be dancing through his uncurbed imagination by night ; and it so happened that on one occasion, having fallen into slumber with all the shafts and wheels of his mill whirling in his mind with the complexity of Ezekiel's vision, he dreamed of the absence of an essential band upon one of the wheels. The dream was fresh in his mind on the following morning, and repairing bright and early to his works, he in an instant detected the deficiency. The revelation was true, and in a few hours afterwards the machinery was in full and successful operation.

Nevertheless, after the difficulties attendant on manufacturing were overcome—after as good yarn could be spun as in England, there was an apathy in the public mind which prevented the increase of business, as might have been expected. The consumers could not realize that as good an article could be made here as that imported. Hence the demand for it was extremely limited. Of the small quantity made the first two years, several thousand pounds of it remained on hand. It was nearly ten years from the commencement of the business in Rhode Island, before a second mill in that State went into operation. Still the profits were large, so that the company in which Mr. Slater was a party continually gained confidence and strength, and was hence in a condition with favorable changes in public opinion to extend the business. This was accordingly done ; and soon after the beginning of the nineteenth century, cotton factories were springing up in almost every direction. As the event proved, Mr. Slater had laid the foundation for a large estate.

The increase of his business, and the brightening of his prospects for permanent prosperity, induced him, probably, to send for his brother. It is believed that the latter reached this country in 1805 or 1806. The presumption is that he brought with him a knowledge of the recent improvements in English machinery. Soon after his arrival a new establishment was projected, to be located in Smithfield, Rhode Island, and the village which in consequence sprang up is called Slatersville. The first spinning was here done in 1807. The establishment was first owned by William Almey, Mr. Brown, Samuel Slater and John Slater, in equal parts ; but it is now owned by John Slater and the heirs of Samuel Slater. Here are about eight hundred inhabitants, depending mainly for subsistence on the business thus carried on there ; and here may be seen all the evidence of thrift and comfort existing under the most favorable auspices.

The following account of the first meeting of the two brothers may not be without interest. When John Slater landed upon a wharf in Providence, he was seen and known by William Wilkinson, a brother-in-law of Samuel Slater's wife. Mr. Wilkinson proposed carrying him to Pawtucket, where his brother Samuel lived. This he did ; and on reaching the house he said to the occupant, "I have brought one of your countrymen to see you—can you find anything for him to do?" Upon which he came up to his supposed countryman, and asked what part he came from ?

"From Derbyshire." "What part of Derbyshire?" "Belper." "Ah, the town of Belper, I am acquainted with that place; what may I call your name?" "*John Slater.*" When Samuel left, John was a boy, and he had changed so much he did not recognize him. My readers need not be told that the interview was a joyful one to the two brothers—it might well have reminded one of the meeting of Joseph and Benjamin. The elder of them asked questions more rapidly than they could be answered. "Is my mother yet alive? How are all my brothers and sisters? How is my old master, Mr. Strutt? How is my old schoolmaster, Jackson?"

For more than twenty years from the time of his brother's arrival, Mr. Slater experienced uninterrupted prosperity. His possessions were increasing in number and value with incredible rapidity. The war of 1812 placed the seal upon his high destiny. By that time he had got so far under way, and his preparations were so complete, others stood no chance for competition with him. Cotton cloth then sold for forty cents per yard, and the demand had no limits. The opinion became prevalent, that such was his wealth, such was his general prudence and sagacity, and especially that such were his talents as a financier, no business disaster could reach him. However, in the great revulsion of 1828 among manufacturers, it was made manifest that he was the sole endorser of three or four large establishments among the unfortunate. Now, for the first time, he was known to make his own business a subject of conversation. He became seriously alarmed and distressed; not that two or three hundred thousand dollars, under ordinary circumstances, would ruin or essentially injure him; but such was the general panic in the community, and among the monied institutions of the country, that a man's solvency was estimated in a ratio transverse to the amount of his property connected with manufacturing. But, as usual, the storm at last subsided. The frantic delirium of the occasion passed off, and thousands wondered how they could have been such fools as to have participated in the excitement. And the fiducial ability of Mr. Slater was not like the seamanship of the mariner who simply makes a quick voyage on a calm ocean, but is unable to navigate his ship in a violent tempest; it had long been distinguished for the former, and was now proved eminently sufficient for the latter exigency. Instead of experiencing any ultimate injury, it is believed he was greatly enriched by the occasion.

It would be useless to say anything more regarding the talents of Mr. Slater. No one could do what he did, unless possessing an intellect of the highest order. It would be no more pertinent to raise a question on the subject, than to make a similar inquiry in regard to Franklin, or Washington, or Bonaparte, or Sir Isaac Newton. But Mr. Slater had other claims to consideration. The poor were never turned from his house hungry. The laborious missionary under his hospitable mansion always found a home; and usually on taking his departure, not a heartless benediction, but a memento wherewith to be warmed and filled in coming time. He apparently esteemed it as much on the catalogue of his moral responsibilities to provide the means of education and religious instruction, and consolation for those in his employ, as to provide the requisites for his own household table three times a day. In addition to the general provision adapted to the diversified tastes and prejudices in such a population, he made special and even princely allowance for the maintenance of the religious institutions connected with his own faith.

During the first six years of the existence of St. Paul's Church in Pawtucket, the period which the writer was Rector, his contributions therefor must have been in the range of one thousand dollars annually.

Among the acts of Samuel Slater deserving commendation, and not inferior to any other in importance, was the establishment of a Sunday School for the persons in his employment. This was according to the example of his old master, Mr. Strutt. For no sooner did he find that his business brought together children and youth destitute of all means of instruction, than he opened in his own house a school on Sundays, sometimes teaching the scholars himself, but usually hiring a person to do it. There are, it is believed, persons now living in Pawtucket who attended this school, and were indebted to it for nearly all the education they received. Mr. Slater always supposed that he thus established the first Sunday School in New England. It was a noble and praiseworthy example! It could scarcely fail that Providence would smile on the exertions of one who thus devised means to improve the moral and intellectual condition of such an interesting portion of the community.

The late Rev. William Collier, in early life pastor of a Baptist church in Charlestown, Mass., and all the latter part of it engaged as a city missionary of Boston, received money to pay for his own education from Mr. Slater, as a consideration for teaching in his Sunday School. At that time, the spring of 1796, Mr. Collier was a student of Brown University, the Rev. Dr. Maxcy being president. The latter received an application from Mr. Slater to send him one of the students for the purpose named, and he would allow him a suitable compensation. The president knowing Mr. Collier was poor, and unable to pay his college bills, recommended him for the station. Mr. Collier at first hesitated, from conscientious scruples, fearing that such services might be incompatible with duties appropriate for that day. However, Dr. Maxcy ultimately prevailed on him to do it. And so little was this kind of Christian charity then understood, that one young man of that college was deterred from accepting a similar overture by his father, a clergyman in Connecticut.

It has been affirmed, on the authority of his own declaration, that Mr. Slater labored on an average not less than sixteen hours a day for twenty years after coming to this country. It might therefore be presumed he would have had but little opportunity or disposition to reflect on matters not connected with his business; yet it is a fact, that on many other topics his views were well digested and philosophical. For instance, on the condition of the poor. His sympathy for the distressed, and his kindness and good will for all, were ever warm, active, practical, and efficient, based upon steadfast principles, and aiming at the greatest attainable measure of good. In the relief of immediate and pressing want, he was prompt and liberal; but in measures which he adopted for its prevention in future, he evinced paternal feeling and judicious forecast. His motto was, "Employment and liberal pay to the able bodied promoted regularity and cheerfulness in the house, and drove the wolf from its door." "Direct charity," he would say, "places its recipient under a sense of obligation which trenches upon that independent spirit that all should maintain. It breaks his pride, and he soon learns to beg and eat the bread of idleness without a blush. But employ and pay him, and he receives and enjoys with honest pride that which he knows he has earned, and could have received for the same amount of labor from any other employer."

There was a peculiar quaintness in Mr. Slater's manner of expression on common subjects that gave great force to the sentiment expressed. Without a knowledge of this, many of his remarks that have been repeated by those who knew him personally, to others appear feeble, if not insipid. But when uttering them, there was a curl of the lip, and an expression of the eye, that made an extraordinary impression on the mind of those who witnessed them. We give an anecdote illustrative of this, during a visit to him of President Jackson, when making his northern tour. After the President and his suite had been conducted through the village of Pawtucket, and were expressing themselves as delighted with its appearance, its numerous and well regulated establishments of business, its ample and commodious churches, and especially its intelligent and well ordered citizens, they repaired to the house of Mr. Slater, then confined by a rheumatic disorder, to pay their respects to a man who had thus benefitted our common country.

With the affability and complaisance so peculiar to General Jackson, he addressed Mr. Slater as the father of American manufactures; as the man who had erected the first valuable machinery, and who spun yarn to make the first *cotton cloth* in America; and who had, by his superintendence and direction, as well as by intense labor, erected the first *cotton mill* in Rhode Island, which was the first in the land of the Pilgrims. General Jackson, who had been informed of these particulars, entered into familiar conversation on the subject. "I understand," said the President, "you taught us how to spin, so as to rival Great Britain in her manufactures; you set all these thousands of spindles at work, which I have been delighted in viewing, and which have made so many happy by a lucrative employment." "Yes, sir," said Mr. Slater, "I suppose that I gave out the Psalm, and they have been singing to the tune ever since." "We are glad to hear also that you have realized something for yourself and family," said the Vice-President. "So am I glad to know it," said Mr. Slater, "for I should not like to be a pauper in this country, where they are put up at auction to the lowest bidder."

It is well known that Mr. Slater was constitutionally frugal and prudent in his expenses. The times, too, in his early life were favorable to such a habit. Now-a-days, many young men with five times the income he had the first ten years of his residence in America, instead of laying up money, as he did, so as to extend his business, spend it all as received, in conformity to the fashionable extravagances of the age. Thus he became frugal from habit, as well as from principle, so that, when he became rich, it seemed to require an effort on his part to change his style of living. We distinctly recollect a conversation on this subject, between him and a few of his intimate friends, when he was a little more than fifty years of age, and estimated to be worth half a million of dollars. It was in the front room of the Manufacturers' Bank, where they were accustomed to meet and discuss all sorts of things of interest. At that time he lived in an old wooden house which might have cost two or three thousand dollars—decent and comfortable, it is true, and much like the better sort of houses in the village, excepting, perhaps, half a dozen. He also owned a good horse and *chaise*, the common pleasure vehicle in that part of New England; but he usually rode in an open one-horse wagon. His friends told him it was not right for a man of his property to live in that style; that he ought to build a better house and keep a *coach*.

Mr. Slater replied much in the following manner :—"Gentlemen, I admit that I am able to have a large and costly house, rich furniture, and servants to take care of it; that I am able to have a coach, with a driver and footman to attend me. And it is not that I am miserly, that I do not have them. But it is a duty in me to set an example of prudence to others, and especially to my children. The world is too much inclined to extravagance. If the style you recommend is to be considered an evidence of wealth, and I were on that account to adopt it, others not able might follow my example, in order to be thought rich. In the end, it might prove their ruin, while prudent and honest people would have to suffer for it. And you know I have six boys. If they live, and have families, each will want to live in as much style as their father. Now if I am able to live as you recommend, my property, when divided in six parts, might not be sufficient to support six such establishments; besides, business may not continue as good as it is at present. I wish to set a good example for my children. If they do not follow it, the fault is not mine." Mr. Slater did not himself materially vary his family arrangements in the above particular; but a few years afterwards he married, for a second wife, a lady of talents and a decent fortune, who very properly did it for him.

Although Mr. Slater was much blessed, and prospered in his business, yet he had, especially in the latter half of his life, severe trials. Soon after coming to this country, he married a daughter of Oziel Wilkinson. The family was in the Quaker connection, and was distinguished for unusual talents. Mrs. Wilkinson was as much distinguished for moral excellence, and her daughters seemed to inherit no small measure of her good qualities. Hence, Mr. Slater was fortunate in his domestic relations. His wife had, we believe, ten children; but, in the latter part of 1812, she died of consumption, four of the children having preceded her to the grave. And one after another of those which then survived have passed away, leaving at present but a single individual of the number to sustain the reputation of their father. This is Horatio Nelson Slater, whom we have seen but once for nearly thirty years. He was a remarkably fine boy; and has, we understand, redeemed the high expectations then raised concerning him.

We have space for a few additional remarks only, having already extended this article to a length not intended. His perceptions were quick, almost like magnetic action. He formed his own opinions; and such were his decision and energy that he was never inclined to relinquish them. This is apparent, from his steady and untiring perseverance in perfecting the plans he had formed. Obstacles rather increased than diminished his ardor. In the life of such an individual, an event of real magnitude is not appreciated, or even seen in all its grandeur and importance till subsequent to the time of its occurrence. The memory of common minds is gradually fading away, till completely lost. Common men die and are soon forgotten; whereas great minds appear more brilliant in the retrospect than when immediately before us. The living age is overcast with clouds of mist and dust, which prevent one from seeing clearly. Hence, the cotemporary aspect of things is often confused and indistinct. The historian's breath must pass over the scene to chase away what is light, and frivolous, and worthless; and then he may collect and reduce to an enduring form what is solid and precious. It be-

longs, therefore, to a succeeding generation to place a full estimate on the mental character of Mr. Slater, and of the magnitude of his labors in this country. Nor is this all. A near view, in point of space as well as of time, will often give one less just conception of great men and their deeds, than a more distant view. The people of Pawtucket, constantly beholding Mr. Slater laboring night and day, sometimes, perhaps, like Franklin, with a bale of cotton on a wheel-barrow, little imagined the extent of mental resources, or the magnitude to successive generations, of the enterprise in which he was so completely absorbed. This could have been far better done by persons more remotely situated. For this there are analogies. For instance, the eye placed too near the canvass of the painter, is frequently bewildered with all the separate multitudinous touches of the pencil; but, when removed to an appropriate distance, these all melt into a harmonious living picture.

Mr. Slater died in 1835.

Art. III.—THE LAW OF DEBTOR AND CREDITOR IN TENNESSEE.

NUMBER III.*

OF THE LIENS OF JUDGMENTS AND EXECUTIONS.

Judgments have a lien on the land of the debtor, and *executions* (the *feri facias*) on the personal property. I am not aware that a *feri facias*

* The present article, the third relating to the Law of Debtor and Creditor in Tennessee, closes the series, so far, at least, as that State is concerned. Our valued correspondent, HENRY G. SMITH, Esq., of the Memphis (Tennessee) Bar, the author of this article, will furnish us from time to time with any alterations that may be made in the Legislature of that State on the subject. We commenced the plan of furnishing our merchants and business men with the series of articles on the Law of Debtor and Creditor in the several States as long ago as 1840, which we have continued at intervals to the present time. These papers have generally been prepared by members of the legal profession, who were at the time practicing law in the States to which the articles refer. As matter of reference for those who have a complete set of the Merchants' Magazine, we will here enumerate the articles on the Law of Debtor and Creditor published in that Magazine, giving the names of the States, the year, volume, and page, so that the law of any State may be readily referred to. In 1840, volume ii., page 321, we published an article on the Law of Debtor and Creditor in *Maine*; *Missouri* in 1840, vol. ii., page 412, and 1841, vol. v., page 252; *New Jersey* in 1840, vol. ii., page 481, and in 1841, vol. iv., page 253; *New Hampshire* in 1840, vol. iii., page 63; *Connecticut* in 1840, vol. iii., page 132; *Vermont* in 1840, vol. iii., page 333; *Pennsylvania* in 1840, vol. iv., page 448; *Massachusetts* in 1841, vol. iv., page 549; *Illinois* in 1841, vol. v., page 446; *Alabama* in 1842, vol. vi., page 155, and in 1846, vol. xv., page 580, and in 1847, vol. xvii., page 57; *Ohio* in 1847, vol. xvii., page 469; *Mississippi* in 1847, vol. xvii., page 179; *Wisconsin* in 1842, vol. vi., page 256; *Iowa* in 1843, vol. vii., page 443; *Louisiana* in 1846, vol. xv., pages 70, 471, and 580; *Michigan* in 1847, vol. xvii., page 274; *Tennessee* in 1847, vol. xvii., page 377, and in 1848, vol. xix., page 386. It will be seen, by the references above, that we have given more than one article on the law of several of the States named, and at long intervals. This has been done in order to embrace the changes made in several of the States, or to furnish additional information touching the laws affecting debtor and creditor. Some thirty distinct governments legislate on the trade of the United States; which trade is so intimately connected with each State, that a merchant in New York, Philadelphia, Boston, &c., in a business not unusually extensive, may have property and rights affected by the law of every State. The fact, generally admitted, that professional men are only able to advise as to the law of the State in which they live, shows at once the importance of such a series of papers.—Ed. *Merch. Mag.*

execution has any lien on land until a levy made. Those liens affect legal estates only, except as will be hereafter stated. The lien of a judgment takes effect from the moment of its rendition, and expires in twelve months. A sale of land under execution upon the judgment after twelve months from the rendition, derives no benefit or support from the *lien* of the judgment. If such sale be made within the twelve months, the purchaser takes the land against any purchaser from the debtor who bought after the rendition of the judgment, and against any previous purchaser whose deed of conveyance or instrument of purchase was not registered before such rendition. As between an execution purchaser and a purchaser from the debtor, there are two questions to observe—first, whether the execution sale was made within twelve months of the rendition of the judgment; or, second, whether the levy of the execution was prior in time to the registration of the instrument under which the purchaser from the debtor claims. If the sale were within the twelve months, or upon a levy made before the registration, the execution purchaser prevails; otherwise, the purchaser directly from the debtor.

Generally, the lien of the common writ of *execution* (the *feri facias*) embraces the period of time between the *teste* and the *return* day. The *teste* is the first day of the term of the court preceding the day of the issuance of the execution, and the *return* day is the first day of the succeeding term. A sale of personal property made by the execution debtor within such period, is subject to the lien, and is liable to be defeated by the seizure of it (the property) under the execution. If not seized on or before the return day, the lien is gone, and the sale by the debtor is good to the purchaser. Each execution has its own lien, exclusive of, and without connection with, any other prior or subsequent execution on the same judgment. The lien is not continued by taking out another execution immediately. Observe, however, the operation of the Registry Law. Gifts or sales of slaves must be in writing registered. If the writing were not registered before the lien accrued, it is not any obstacle to the execution, and the slave may be taken by it from a purchaser from the debtor, though such purchase were made before the judgment was rendered. It was said, that generally the lien of execution has relation to its *teste*. The qualification implied is, that the lien is not allowed to reach back behind the actual time of the rendition of the judgment. The common law fiction that the term of a court is all one day, is in this respect disregarded.

The lien of *judgments* depends upon their being rendered in the court of the county in which the debtor resides, or if rendered in another county, upon their being registered in the county of his residence. When rendered or registered in such county, the lien embraces all his lands within the State. If not rendered or registered in such county, there is no lien until levy of execution.

The lien of an execution embraces only the personal property of the debtor in the county in which the writ is running. Without doubt, the creditor may have several executions running in several counties at the same time, but a sufficient levy of one will satisfy all.

By judicial construction or legislation, in regard to the lien of unsatisfied judgments upon lands acquired by the debtor subsequent to the rendition of the judgments, the law is declared to be, that after acquired, lands stand subject to such lien for twelve months from the time of acquisition, in the same manner as lands owned at the time of the rendition. Decrees

in Chancery for money, and executions on such decrees, have the same liens as judgments and executions at law.

In case the execution of a judgment be prevented by a writ of error, or an appeal in the nature of a writ of error, or an injunction, the lien of the judgment upon the lands of the debtor begins with its rendition and continues for twelve months after the affirmance of the judgment or the dissolution of the injunction.

The judgments and executions of justices of the peace, have no lien until levy.

The act of 1832 (c. 11) declares in substance, that a judgment or execution at law shall not bind equitable interests in real or personal estate, or other property, or legal or equitable interests in stock or choses in action, unless a memorandum of the judgment be registered within sixty days after the rendition of the judgment, in the county where the land lies, and in all other cases in the county where the debtor resides, and the lien shall cease unless a bill in Chancery to enforce the lien be filed within ten days of the return of the execution unsatisfied.

EXECUTORS AND ADMINISTRATORS, AND THE ADMINISTRATION OF ESTATES OF DECEDENTS.

Administrators are appointed, and executors and administrators are qualified by the county court, which consists of three justices of the peace, elected annually for that purpose by the justices of the county, and which county court sits the first Monday of each month. Administrators give bond with sureties in double the estimated value of the personal estate of the decedent for the faithful administration of the estate, and executors give a like bond unless specially exempted from so doing by the terms of the will. The theory in Tennessee is, that the office and powers of an executor begin with his qualification by the court, and not at the death of the testator. The court can, on sufficient cause, remove from office executors, &c.

The office and power of an executor, &c., appertains only to the personal estate, not to the realty. Real estate vests in the heir or devisee immediately on the death of the decedent, and can be subjected to the payment of his debts only after the legal exhaustion of the personal estate. An actual waste of the personalty may be made by the administrator, &c., so as in fact to prevent the collection of the debt of a creditor, but this does not enable the creditor to resort to the realty. He must in such case pursue the administrator, &c., to personal liability, and make the debt out of him or his official sureties. The realty is not liable until there be an ascertained legal exhaustion of the personalty.

Executors and administrators are not suable for the debts of the decedent until six months after their qualification, nor can execution issue against them until after twelve months. They are not permitted to confess judgments or to suffer themselves sued within the six months.

They are not required to distribute the surplus of the estate to legatees and distributees short of two years after qualification. At the expiration of two years, they are required to divide and pay over, receiving from the distributees, &c., bonds to refund in case further debts appear.

Persons having debts or demands against decedents or their estates, are required, if not residents of the State, to sue the executor, &c., within three years of his qualification, and if resident in the State, within two

years ; otherwise their debts or demands are absolutely barred, and it is *waste* in the executor, &c., if he fail to plead the statute in bar of the debt or demand. Debts not due at the time of the qualification of the executor, &c., have probably the two and three years after due, before they are barred. Persons under age, of unsound mind, and married women, have one year after coming of age, sound mind and discovery, to sue and avoid the bar in such case.

In regard to the *dignity* of debts, scarcely any occasion to regard this occurs in Tennessee, there being modes prescribed by statute for administering insolvent estates of decedents, which place all debts and demands on equal footing. So far, however, as *dignity* is concerned, the law stands much as when our forefathers brought it from England, the chief modification being that debts owing upon bills, bonds, notes, and settled and liquidated accounts, are made of equal and chief dignity by the act of 1786.

If the estate be insolvent, it is the duty of the executor, &c., to report the same to the clerk of the county court for administration under his direction, if less than \$500 in value ; and if the value exceed \$500, the executor ought to file a bill in Chancery against all parties concerned, including creditors, &c., for administration and settlement of the estate in that court. When in Chancery, creditors have abundant cause to know "the sickness of heart which comes of hope long deferred." The statute under which the proceeding is had, contemplates an administration sufficiently speedy, but the practice has "dragged its slow length along" with a tardiness quite equal to the proverbial pace of equity.

In cases before the clerk of the county court, he prescribes a day by which all claims against the estate are required to be filed with him or are otherwise absolutely barred, and he causes publication of the appointed day to be made in some convenient newspaper. After the day, he ascertains and allows or disallows the claims filed, and from time to time declares and makes distribution as funds come to his hands from the administrator, &c. In cases in Chancery, the creditor ought to have a lawyer, and it is needless to undertake to detail here the mode of proceeding.

When administration is in Chancery, the settlement of the accounts of the executor, &c., is of course made in that court. When the administration is before the clerk of the county court, and in the ordinary cases of the administration of solvent estates, the settlement of the executor, &c., is made with the clerk of the county court, and is reported by him to the court in session, which if it approves the settlement confirms it, and thereupon it is taken and deemed *prima facie* correct, as against all persons concerned.

The compensation of executors, &c., is adjusted by the Chancery court, in cases in Chancery ; and in other cases by the clerk of the county court, subject to the correction of his court. It rarely exceeds five per cent on the amount of receipts.

NEGOTIABLE PAPER.

The commercial law, as expounded in the common law courts of the United States and England, is the law of Tennessee, with little variation. In regard to negotiable instruments, the doctrines declared in Story's *Treatises*, touching the qualities, title, transfer, dishonor, liability of parties,

&c., &c., are for the most part the recognized doctrines of the courts of Tennessee.

By statute of 1786, all bills, bonds or notes for money, as well those with seal as those without seal, those which are not expressed to be payable to order or for value received as those which are so expressed, are declared to be negotiable. A very common paper is the sealed note. It is in form as a promissory note, with a scrawl for the seal. The seal has the effect to except it from the operation of any of the statutes of limitation, to prevent any question at law as to the want, failure or fraud in the consideration, and generally attaches to the instrument the qualities of a specialty.

The plea of *non est factum*, and any plea which denies the execution or indorsement of any instrument which is the foundation of the action, are required to be put in on oath.

Bonds with collateral conditions, bills or notes for specific articles, or for the performance of any duty, are assignable; that is, may be sued on at law or in equity in the name of the assignee.

A note for money payable in bank notes, is not *negotiable* paper in Tennessee.

The transfer of negotiable paper in payment of a precedent debt, is not deemed to be in the due course of trade, and is therefore subject to any equities or defences in favor of the maker or any prior parties on it, which would affect it in the hands of the indorser or party transferring it. This decision was made while such was the current of the courts in New York, and before the question was otherwise settled in the Federal courts. Thus, precisely opposite rules would be applied to the same commercial question, in the State and Federal courts in Tennessee. It is understood that the Supreme Court of Tennessee is not satisfied with the rule as declared in that court, and that the application of it will be limited as much as can be consistently done. As a general rule, all the parties upon negotiable instruments may be sued together, joined in the same action. It is said, that the acceptor of a bill of exchange cannot be joined with other parties. The law declares it to be the duty of the sheriff or other officer having an execution upon a joint judgment of this kind, to make the money out of the parties, in the order of their liability upon the paper.

INTEREST.

The constitution declares that the rate of interest shall be fixed by the Legislature, and shall be equal and uniform throughout the State. The Legislature in 1835 established the rate at 6 per centum per annum, upon all bills, bonds, notes, and liquidated accounts signed by the parties, from the time when due, unless otherwise specially expressed. Bills, bonds and notes payable on demand, draw interest from the time of demand actually made. The charters of the banks authorize the taking by those institutions of 7 and 8 per centum upon the discount of paper having time to run to maturity beyond certain specified periods. The validity of these clauses in the charters has been seriously questioned, in reference to the constitutional requirement that the rate shall be equal and uniform, but I am not aware that the question has ever been before the Supreme Court.

The statute does not give any interest upon debts due by open account. But it is generally allowed by jurors upon trials, in the shape of damages for detaining or not paying the debt.

The taking of usury is prohibited, and is a misdemeanor punishable by indictment and fine equal to the usury actually received. Contracts in writing, which are upon their face usurious, are void; that is to say, no action can be sustained on such instrument. Usury actually taken, is recoverable from the usurer, either by the debtor or by any of his creditors. In an action upon a bill, bond or note, which does not appear upon its face to be usurious, but which in fact embraces usury, the defendant may put in his plea on oath setting forth the usurious amount, which plea is deemed to be true, and avoids the excess over legal interest, unless the creditor puts in on oath a denial of the plea, in which case an issue is made up and tried, and the usurious excess, if any be shown by the evidence, is avoided, and judgment given the creditor only for the actual debt and legal interest. There is no forfeiture of the debt, or other punishment for usury than the indictment and fine above mentioned.

SET-OFFS.

These stand much as in the law of England. The statute allows set-offs where there are mutual *debts* between the *plaintiff* and *defendant*; or if either party sue or is sued as executor or administrator, where there are mutual debts subsisting between the decedent and either party, one debt may be set off against the other. Set-offs are therefore *at law*, only of debts between the parties to the action. Chancery allows set-offs in other cases, upon its own principles, which cannot be well detailed here.

BOOK ACCOUNTS.

A creditor or his executor may, by his own oath, prove an account for merchandise or service (not for money lent or the like) not exceeding \$75, and which has not been due over two years, and when it is a book account and the creditor has no other means of proving it than by his own oath.

So creditors, residing in other counties or States, may prove their accounts to any amount and without reference to time other than so far as the general statutes of limitation operate. Such proof is made by affidavit that the account is correct, before a justice of the peace, whose official character must be certified by the clerk of the court of his county. The account so proved is taken to be true, unless denied by the debtor on oath, in which case it is tried and determined by jury upon evidence.

THE PRACTICE UPON EXECUTIONS.

The circuit courts which have original cognizance of all actions at law, (except debts under \$50,) sit in each county thrice yearly. In regular practice as prescribed by statute, the pleadings ought to be made up at the first term after the beginning of the suit, and trial and judgment had at the second term. Such is the usual course of practice in actions of debt where no substantial defence is made. In causes seriously litigated, further delay is not unfrequent.

The clerks are directed by statute to issue and place in the hands of the sheriffs, within 20 days after the end of the term, executions upon judgments rendered during the term. Executions are returnable upon the first day of the ensuing term, and the sheriffs have until that day to make the money upon them, and do not generally obtain it sooner.

The property which may be seized and sold under execution, is the

personal and real property of the debtor in which he has the *legal* estate or title ; and in regard to personalty, that which is tangible, corporeal, susceptible of actual seizure and delivery. The statute directs the sheriff to make the money of the personalty of the debtor, if practicable, rather than of his real estate. A mode exists of subjecting to the execution debts owing to the debtor by process of *garnishment*. It is done by the sheriff who has the execution serving upon the supposed debtor of the debtor written notice to appear at the next term of the court, and answer upon oath what he owes the execution debtor, or what of his effects he has in his hands. If the garnishee debtor do not appear and answer at the next term after service of notice, a conditional judgment for the whole debt is rendered against him in favor of the original (garnishing) creditor, to be made absolute at the following term unless he appear at such term and put in his answer on oath. If he appear and deny his indebtedness and having effects, he is discharged. If he admit indebtedness, judgment is entered up against him to the extent of the amount admitted, not however exceeding the debt owing on the original judgment. If he admit effects, an order is made on him to deliver them to the officer. The answer of the garnishee debtor is conclusive, and the practice requires a clear admission of debt to authorize a judgment against him. Uncertainty entitles him to a discharge ; as where the answer was, that he had executed to the judgment debtor a negotiable note which remained unpaid, but whether it was still owned by the judgment debtor, the garnishee did not know.

When personal property is levied on, the debtor is allowed to receive back and retain the property until the sale, upon giving a bond with sureties in double the value, for the delivery of the property to the officer at the place and time appointed for the sale. This is called a delivery bond. If the property be forthcoming according to the condition, the bond and the sureties are discharged. If it be not thus delivered, the bond is forfeited (as it is called) and the sureties and parties in it stand liable for the debt, and the officer, if there be time before the return day, levies anew, and makes the debt of the property of any of the parties who joined in the bond. In case there be not time to levy anew before the return day, the officer returns the execution with the delivery bond, and thereupon a new execution issues against and is made out of the parties included in the bond. The forfeiture of the bond extinguishes the original judgment and discharges its liens, together with all liens of execution accruing or existing prior to the forfeiture. The forfeited bond is deemed a *quasi* judgment. Parties in the original judgment who do not join in the bond, are discharged of the judgment.

Land levied on is sold, and the absolute title vested in the purchaser, subject to be divested by redemption. This may be done within two years of the sale, by the debtor or any judgment creditor of the debtor. The purchaser, if a creditor, may advance or increase his bid to the extent of his debt, at any time within 20 days of the sale. A creditor, upon redeeming, pays the purchaser the amount of his bid and interest thereon at 6 per cent per annum, and likewise gives the debtor a credit upon his (the redeeming creditor's) demand, to the extent of 10 per cent or more of the amount bid at the execution sale. The process of redemption may be continued through an indefinite series of creditors, and the debtor may redeem from the last, within the prescribed time, by paying the accumulated amount. It may be added, that the right of redemption extends to all sales

of land under executions, decrees in Chancery, deeds in trust, and mortgages. There is, however, an exception. Lands sold by decree in Chancery, may be ordered by the court to be sold upon a credit of not less than 6 months, in which case the sale is absolute and no redemption is allowed.

When execution on the judgment of a justice of the peace is levied on the land of the debtor, the execution with the levy indorsed, together with all the original papers in the case in the justice's hands, is returned into the next circuit court of the county, which enters up a judgment accordingly, whereon is issued an order of sale by virtue of which the land is sold.

Proceedings against Sheriffs, &c. If the sheriff or other officer make a false or insufficient return of an execution, or fail to make return in time, or fail to pay over the money when made, the creditor may have judgment forthwith by motion against the defaulting officer and his official sureties, for the amount of the debt, interest and costs, together with 12½ per cent damages. Notice is not required to be given to the officer when the motion is made, at the term to which the execution is returnable. When made at a subsequent term, five days' notice to the officer is prescribed.

Art. IV.—COMMERCIAL CITIES OF EUROPE.

NUMBER X.

MONTPELLIER.—NISMES.

SITUATION—INSTITUTIONS—FACILITIES FOR COMMERCE AND AGRICULTURE—MANUFACTURES—BLANKETS—COTTONS—CHEMICAL PRODUCTS—LIQUORS, ESSENCES, PERFUMES, BRANDY, AND SPIRITS—OTHER MANUFACTURES—COMMERCE.

MONTPELLIER, the chief place of the department of Hérault, in the south of France, lies near the Mediterranean, in latitude 43° 36' 16" north, longitude 1° 32' 30" east from Paris. Its population is about 36,000.

Institutions. Montpellier has a chamber of commerce, a tribunal of commerce, a celebrated medical faculty, a botanical garden, which is considered the second in France, a cabinet of natural history and physics, a museum, an establishment for loaning money on pledges without interest, (the only one of the kind in the country,) commercial and agricultural societies. There is a discount branch of the Bank of France established here, as also a national entrepot.

Facilities for Agriculture and Commerce. Montpellier is one of the most industrious of the French cities, and is a very important place in the southern commerce of the republic. Nature has done much for its prosperity. The department of Hérault, in which it is situated, is one of the most fertile districts of France, and produces a great abundance of articles important to commerce, as well as the raw materials for many branches of industry.

The city is connected by various land communications with the two ports of Cette and Agde on the Mediterranean, and by various canals uniting these ports, and extending inland from them, it communicates, on one side, with the basin of the Garonne and the Bay of Biscay, and, on the

other, with the basin of the Rhone. By these means it is connected with the entire inland navigation of the country ; so that, should maritime wars put a stop to the trade which it carries on with various parts of the globe, it would still find ample encouragement and reward for its industry in the demands of its domestic commerce. The city is further connected with Cette by a railroad.

Montpellier is one of the most salubrious cities on the Mediterranean. Its pure air, delightful climate, and beautiful environs, make it a favorite resort of invalids.

Manufactures—Blankets. The manufacture of woollen blankets is a very important branch of the industry of Montpellier. Even as far back as 1789, it was carried on with success. At that time, Neckar furnished the manufacturers of the place with samples of English blankets. These were imitated with great exactness, and considerable quantities of the fictitious article were exported to Louisiana and to New England.

After the wars of the Empire, the house of Granier sent persons to Great Britain to study the manufacture ; and by the information and skill thus gained, they were soon enabled to compete with the English exporters in the markets of Louisiana and most of the slave States, where the consumption of French blankets has, for a long time, been of considerable importance. The blankets are purchased for the use of the slaves.

Montpellier has three blanket factories. The most extensive of these manufactures from 4 to 500 a day, and sells yearly at New Orleans, between 1,500,000 and 2,000,000. The wool used in this manufacture is mostly that of the Barbary States, and is purchased at Marseilles. It is spun in the factories.

Cottons. The manufactures of cotton are always progressing. Some years ago, they were represented by the following figures :—Spinning, 2,000 spindles, producing 16,000 kilograms. Weaving, 280 looms, producing 7,100 dozens of handkerchiefs, 2,000 pieces of calico, and 6,700 pieces of striped and checked cotton.

It was the manufacturers of Montpellier who naturalized, in France, the dyeing of cotton thread, an article formerly obtained only in the Levant. They invited Greek dyers to their city, learned their art, and carried it to the highest perfection. Their red and violet threads have made the fortune of the manufacturers of Chollet, Mayenne, and a part of Normandy. To the manufacturers of Montpellier belongs also the credit of having invented the stuff called *côte pali*, of which the warp only is cotton, the woof being of silk dyed raw, which covers and protects the warp perfectly. This stuff is manufactured in handkerchiefs and in cloth for robes.

There are various manufactures of cotton in the department, as well as of canvass, hempen cord and rope, slippers, &c.

Chemical Products. Its manufactures of this character, as well as those of liquors, essences, perfumes, spirits and brandy, Montpellier owes especially to the character of its climate and of its soil.

Verdigris has been manufactured at this place for a very long period. It was long believed that the vaults of this city alone were adapted to the production of the article, but its manufacture is now extended throughout this department and even beyond it. This manufacture has made great progress by the substitution of grape skins for vinegar, in oxydizing the copper and detaching its crust.

A few years ago, there were forty factories of chemical agents in Mont-

pellier, and their number must now be still greater. They produce alum, Prussian blue, sulphuric acid, nitric acid, mineral salts, &c. The factory of M. Beraud is the most ancient in the south of France. It was founded in 1783 by Count Chaptal, to whom the world is indebted for many discoveries and improvements in this branch of industry.

Liquors, Essences, Perfumes, Spirits and Brandy. The manufacture of liquors, essences, and perfumes at Montpellier is very ancient, and its products have always been celebrated. Of late, however, this department of industry has declined in importance.

Nearly 30,000,000 gallons of the wine of the department are annually converted into brandy and spirits, in more than 200 distilleries, 70 or 75 of which are in Montpellier. We do not consider, in this calculation, the number of proprietors who distil their own wines. The processes most generally used are those of Adam and of Baglioni.

Other Manufactures. Ordinary hats are manufactured in considerable quantity at Montpellier. The tanneries of the city produce about 300,000 francs a year. The products of the potteries and tile kilns of the arrondissement, are about 40,000 francs in value. The number of oil mills is 74. The importance of that industry may be judged of by the quantity of land employed in the cultivation of the olive, which is, in the whole department, about 18,000 acres, and in the arrondissement of Montpellier about 7,000, and this without calculating the great number of olive trees that grow in the vineyards and tillage lands.

Besides the articles we have already mentioned, Montpellier produces painted paper, a considerable quantity of beer, corks, surgical and medical instruments, carpets, &c.

Commerce. Montpellier sends to the interior and abroad, large quantities of wine and spirits. Most of the old wine is sent to England. Considerable quantities of imitated Portugal wine is exported to Brazil.

The other products of the neighborhood, which are important in the foreign and domestic commerce of the place, are olives, dried fruits, liquors, olive oil, chemical products, &c.

NÎMES.

NÎMES—MANUFACTURING INDUSTRY—MANUFACTURES OF SILK—OTHER MANUFACTURES—TRADE AND COMMERCE—WINES AND SPIRITS.

NÎMES, an important manufacturing city, is situated in the southern part of France, near the river Rhone, and about 180 leagues S. S. E. from Paris. Its population is about 43,000. It has a Chamber of Commerce, a Commercial Tribunal, an Agricultural Society, and a School of Design and Mechanics.

Manufacturing Industry. The manufactures of Nîmes are of a various and changing character. They consist chiefly of articles of export and articles of dress. Hence foreign competition, and the caprices of fashion, often put a sudden stop to the industry of the place, until its people can find new markets, or produce new objects of consumption. In order as much as possible to avoid these revulsions, many houses manufacture at the same time the most heterogeneous articles, such as shawls and gloves, bonnets and robes. If to these disadvantages we add the fact that the city is without water for nearly three months in the year, and that a single source supplies both its manufactures and its consumption, the energy and

perseverance by which its people have made the city important for its industry will appear astonishing.

Manufactures of Silk. The manufacture of silk at Nîmes is very ancient. For two hundred years it has furnished the markets of Paris with sewing silk and lace. This place is also the cradle of the art of stocking weaving. In 1640, two mechanics of the city, Felix and Pastres, brought from England the art of constructing stocking looms. The manufacture spread rapidly, and in 1710 this city alone counted 2,000 looms.

The manufacture of silk stuffs and thread, and the dyeing of silk, were encouraged by Henry IV., who granted a pension to one Crocard of this city, at the same time giving him permission to plant mulberry trees wherever he might think proper. But the revocation of the edict of Nantes, and the prohibition of the introduction of foreign silk into Languedoc, were severe blows to this branch of industry, which for a time was nearly abandoned.

At present the products of the factories of Nîmes are chiefly silk and cotton stuffs and fancy goods, such as shawls, ropes, cravats, underclothes, &c. The manufacture of robes was for a long time by far the most important, but its place was taken some twenty years since by the manufacture of shawls, which in 1834-6 was in its turn displaced by that of cravats, scarfs, and waistcoats.

The printing of silk stuffs is of great importance in the industry of Nîmes. It has of late been carried on with great activity, and has become of no less importance than weaving to the working classes. Nothing but a good supply of water is needed to enable the manufacturers to give a great extension to this branch of their business.

The manufacture of silk hose, though less important at Nîmes than in some other places in the neighborhood, still deserves notice. At Vigan and Uzès, there are about 3,000 stocking looms; at Nîmes about 1,000.

Other Manufactures. Nîmes has many distilleries, 7 or 8 tanneries, and an extensive manufactory of oil of palma christi, which is sent into every part of France. The manufacture of carpets was recently introduced here to furnish labor to the hands thrown out of employ by the decline of the shawl manufacture. Besides these, there is a manufactory of indigenous sugar at Nîmes, the success of which is greatly hindered by the difficulty of obtaining a supply of the raw material, the neighboring cultivators being generally unwilling to plant the beet.

Trade and Commerce. The transit commerce of Nîmes is chiefly limited to its relations with Alais, Saint-Jean-du-Gard, Saint Hippolyte, and other towns of Cevennes. It is rarely that the merchants of these places send to the places of production to supply their demands. Nîmes furnishes them with the colonial products. The olive oil of inferior quality coming from Corsica, Spain, and Italy, and not used in the manufacture of soap, finds a certain market in the mountains of Cevennes, and this trade is the exclusive monopoly of the merchants of Nîmes. Other articles the Cevennois obtain indifferently from Nîmes and Montpellier.

Nîmes is the general entrepôt of raw and prepared silk for the south of France. From its storehouses these articles are usually sent to the places of manufacture, though sometimes the spinners and dyers prefer to send to Lyons or Paris.

Nîmes is also a centre of trade in medicinal and tinctorial plants, in grass seed and in *tournesol en drapaux*, or cloth colored with *croton tinc.*

torium, which is sent to Holland to be used in coloring cheese. The most important seed exported from Languedoc is that of lucerne, since this seldom arrives at maturity in the northern part of France. The exports of clover seed are less considerable. These articles are sent to London, Hamburgh, Lubec, and St. Petersburg.

Wines and Spirits. The most important trade of the department is that in wines and spirits, and nearly all the transactions are at Nîmes. For many years great quantities of wine were sent from this place to Lyons, Châlons, Besançon, and into Germany, but of late this trade has greatly diminished in extent and importance.

These wines were mixed with those of the north, in order to color and strengthen them. As the export of spirits has increased with the falling off of that of wine, it is to be presumed that they are used for the same purpose.

ART. V.—COMMERCIAL CITIES AND TOWNS OF THE UNITED STATES.

NUMBER XIV.

RICHMOND, VIRGINIA.

RICHMOND, the political and commercial capital of Virginia, is situated on the north side of James River, in latitude 37° 42' N., longitude 77° 26' W., about 130 miles from the entrance of Chesapeake Bay. The situation is eminently beautiful, on an amphitheatre of hills; the bases of the upper ones washed by the rapids of the river, which is here interspersed with numerous islands, and spanned by a railroad bridge 3,000 feet long and about 50 feet high, while the tide flows to the foot of the hills at the eastern portion, meeting the rapids about midway of the city. At their junction terminates a deep and winding valley, through which flows a small stream, dividing the eastern and western portions of the city. A bridge for common vehicles crosses the river from this valley to the small town of Manchester, and near this a second railroad bridge is about to be erected.

Splendid views of the city and surrounding country are presented from various points, each varying the scene. The river flows over a bed of granite, of which there are inexhaustible quarries on its banks, and which is now being extensively used for building and other purposes. There are some handsome public structures in the city, and many private ones. It is supplied with water forced up from the river to a reservoir above the level of the most elevated sites, but is not lighted either with oil or gas.

The capitol contains a statue of Washington, (by Houdon, a celebrated French sculptor,) the only one ever taken from life, and considered by his cotemporaries perfectly accurate. It is certainly desirable that copies or casts of this statue should be made and extensively distributed. In the event of its destruction (as was the case with Canova's splendid work at Raleigh) there would remain no representation in marble of the features, figure, size, and even costume of our national father, exactly as he appeared in the prime of life. Even as a matter of profit it would be worth the attention of a competent artist to make copies.

The climate of Richmond is salubrious, and the hilly and undulating surface of the city is favorable to health and cleanliness. The markets are well supplied with meats and vegetables, tolerably so with fruits, but in these there is great room for improvement.

A descent in the river of about 80 feet within a few miles above the city furnishes a great amount of water-power for propelling machinery, and it is used to a considerable extent, though far less than its capacity. The best bituminous coal is mined from 8 to 20 miles above the city, and iron ore abounds in the country beyond. Copper ore is also found at no great distance and mined to a small extent. Some gold mines are now worked probably. With all these, and many other elements of prosperity provided by nature, there is wanting, to bring them into full and active operation, an accession of such an enterprising, active, and industrious class of citizens as exist in New England, and develops her less abundant resources. Such a population is gradually but slowly forming, but the prevalence of slavery is a bar to its rapid increase. Virginia, like the States south of her, is, in a great measure, dependent on the superior industry and enterprise of her eastern brethren for many of the simplest and most necessary articles in ordinary use, from brooms, buckets, and axe helves, up to shoes, clothing, and carriages.

The population of Richmond is between 27,000 and 30,000, of which probably two-fifths are blacks. The increase within the last 10 or 15 years has been more rapid than at any previous period.

The principal manufactures are of tobacco, flour, iron, cotton, and woollens. Of tobacco there are thirty-five to forty factories, and ten or twelve stemmeries, which work up more of that useless weed than is manufactured in any other place whatever—not less than 12,000 to 15,000 hogsheads annually. It is distributed to every part of the world, chiefly from New York, Boston, &c. About two thousand five hundred black operatives are employed in the manipulation.

Richmond possesses, besides some minor establishments, two of the most extensive flour mills in any country. The "Gallego" and "Haxall" mills, each running twenty or more pair of stones, and each capable of turning out, under favorable circumstances, from 800 to 900 barrels of flour in the twenty-four hours; but there is not a regular supply of wheat to keep them at work throughout the year. This flour ranks higher than any other, and forms a large portion of the supply to the Brazilian market—say from 60,000 to 70,000 barrels annually. Attached to these establishments are mills for making kiln-dried corn meal to a large amount.

For the manufacture of iron there are three rolling mills, and the quality of what they make is such as to give it preference in the navy-yards. Heavy rails are also rolled out at these works. Attached to one of them is a foundry for the casting and boring of cannon for the navy and fortifications, and an establishment for the same purpose, exclusively employed, exists a few miles above the city. Cannon balls and shells are furnished by foundries higher up the river. An extensive nail factory (the Belle Isle) is erected on one of the islands in the river, producing about 75,000 pounds of nails per week. Besides these, there are several foundries and machine shops in the city for making all sorts of heavy machinery, steam-engines, locomotives, &c. Four cotton mills, in Richmond and Manchester, work up nearly 3,000,000 pounds of cotton per annum, and a woollen mill converts about 600,000 pounds of raw material into blankets and

flannels—the weekly product being about 2,600 blankets and 12,000 yards of flannels. Nearly all the wool is imported, although there is no finer region for raising sheep than the mountains and valleys of Virginia.

An extensive paper mill is now in successful operation, but this, as well as several of the establishments above mentioned, was commenced by a joint stock company, and few of them succeeded until managed by individual enterprise.

The coal trade of Richmond is considerable, but since the introduction of anthracite the export demand is chiefly confined to the supply of iron works in the northern and eastern States.

The supply of pig iron from the upper country has been gradually on the increase, but the means of transportation are so imperfect and expensive as to limit the business to a tithe of what it might readily become with proper facilities.

There are three banks, with branches in the smaller towns. The aggregate capital appropriated to Richmond is about \$2,200,000. The funds of three insurance companies, and as many savings banks, add to the money facilities.

The foreign export trade is chiefly in tobacco to all parts of Europe,* flour and grain occasionally, and in flour to Brazil. The export of Indian corn and meal may become large should a continuance of foreign demand encourage an increased production. Vessels drawing more than 10 or 11 feet water cannot come up to the city, and such load at City Point, Bermuda Hundred, or Port Walthall. Vessels lying at these ports load indiscriminately from Richmond and Petersburg; it is, therefore, difficult to designate their respective proportions. The whole are embraced as exports from James River. The principal obstacles to the removal of the bar, seven miles below the city, are constitutional scruples or strict constructions. The import trade direct from Europe, or other countries, is now inconsiderable, having gradually diminished with the increased facilities of New York by her regular packets and steamers to Europe.

The inspections of tobacco in Richmond of late years have been—

1841.....	hhds. 18,267	1845.....	hhds. 21,902
1842.....	23,129	1846.....	19,572
1843.....	22,829	1847.....	19,993
1844.....	19,147	1848.....	15,733

In addition to which, from 10,000 to 16,000 hogsheads are here received from other inspections in the interior.

The tonnage on the custom-house books is only 7,800 tons, and but 1,950 of this in foreign commerce.

The James River Canal is the principal channel of trade with the interior. This work is completed as far as Lynchburgh, a distance of 147 miles, and is in course of construction to the base of the Alleghany Mountains. When this extension shall be completed there will probably be a great increase in the iron trade, as well as that of other branches; but until the lines of improvement shall be extended to the Ohio and Tennessee Rivers, the amount of transportation will be inadequate to compensate for the outlay, which has already exceeded seven millions. The

* For exports, inspections, etc., of tobacco at Richmond for a series of years, see *Merchants' Magazine* for November, 1848, page 545—and for inspections of flour at Richmond in each year from 1819 to 1848, see *Merchants' Magazine*, same number, page 546, vol. xix., No. 5.

other existing lines of internal improvement connected with Richmond are railroads, extending across the State from the Potomac to the Roanoke, connected with which is the Louisa Railroad, running westwardly, and in course of construction to the Blue Ridge. The two termini of the southern line from Petersburg connect with the North Carolina railroads to Raleigh and Wilmington, and efforts are making to extend these to the great South Carolina lines—the only gap which remains between the North and South.

A second southern line of railroad has been commenced from Richmond, passing through a part of the coal region, (where one already exists,) to extend to Danville, on the upper Roanoke. This will somewhat conflict with several existing improvements by canals and railroads.

The policy, or rather the impolicy of Virginia in her system (or want of system) of internal improvements, has prevented the completion of a great western line of communication. When one work is proposed, a number of others in different directions are simultaneously suggested; and by the "log rolling" system, one great stem is obstructed by many minor ones, and the resources of the State being inadequate for all, either the whole fail, or many are authorized which prove abortive. Another impolitic, if not unjust course has prevailed. When a useful and profitable work has been completed, a rival one has been chartered, and the resources of the State granted in aid of it; and if completed it is not only unprofitable in itself, but renders the previous one also unprofitable, and thus some millions have been thrown away, and one of the rival works ultimately goes to decay. The funds which have been expended in Virginia, if judiciously applied, would have completed one great line of improvement through the State from east to west and one from north to south, with which lateral branches might have connected, to the benefit of every part. Richmond is well provided with churches for all denominations and with good schools. Her Medical College has attained a high rank in that department of science, but she lacks an University and an extensive public library.

ART. VI.—THE GOLD REGION OF CALIFORNIA.

The earth "hath dust of gold."—Job xxviii, 6.

From time to time since the conclusion of the treaty with Mexico, ceding Alta or Upper California to the United States, rumors, vague and disconnected, and too indefinite to be called reports, reached us from the Pacific that gold had been discovered in the newly acquired territory, in large quantities. The stories were barely credited, for no other reason, that we are aware of, than the time-honored one, that they were too good to be true. Here the moralist and philosopher will perhaps object that if only what is good is incredible, there was no reason in the world for disbelief. They will point to the warnings of old philosophy, the admonitions of the wisest of men, and the classic anathemas of the poets against the *auri sacra fames*.

However that may be, whatever view be taken of the good or the evil of the possession of much treasure of gold and silver, whatever applica-

tion the sad lessons taught by the experience of Spain and Portugal with their American mines may be thought to have to this age and our race, there is no longer any doubt about the fact that gold in immense quantities has been found in California. It is attested by the written statements, official and private, of eye-witnesses, well authenticated, detailed, and matter of fact, and which are all the more astounding from the entire absence of any attempt at exaggeration. The difficulty under which the writers labored, seems to have been not to convince others, but themselves. Their subject was too great in itself for any exaggeration in treating it. Mr. Thomas O. Larkin, late United States Consul at Monterey, writing on the 28th June last, and referring to a previous letter, says, that before sending it he showed it to several friends, because he "doubted his own writing," and it was only when convinced of the truth of his own statements by others, that he dared to send his account. Colonel Mason, Governor of California, excuses himself for not reporting to the War Department a discovery made in February until the middle of August, because he could not bring himself to believe the reports that he heard of the wealth of the gold district, until he visited it himself. This unaffected astonishment of the narrators themselves, their unwillingness to believe, and their fear of not being believed, are more expressive and convincing than the most labored rhetoric. One writer only is made eloquent, not so much by his subject, as by the fear of disbelief in the friend to whom he writes. "You are now all incredulous," he says, writing on the 10th September last, "you regard our statements as the dreams of an exalted imagination; but what seems to you mere fiction, is stern reality. It is not gold in the clouds, or in the sea, or in the centre of a rock-ribbed mountain, but in the soil of California—sparkling in the sun, and glittering in its streams. It lies on the open plain, in the shadows of the deep ravine, and glows on the summits of the mountains, which have lifted for ages their golden coronets to heaven."

Thus, the rumor which came at first, indefinite and vague, has burst forth into a vivid and golden reality, like the sun when, breaking through obscuring mists, from which it had loomed out dim and yellow, it overpowers, almost more than pleases, by excess of light.

With this certainty before us, our prayer for the country cannot be for delivery from temptation, but must be for power to overcome it, and educe from it good.

In addition to the letters of the 1st and 28th of June last, from Mr. Larkin to Mr. Buchanan, Secretary of State, the letter of the 10th September, published in the Washington Union, and the report of Colonel R. B. Mason, Governor of California, to Adjutant General Jones, dated August 17th, 1848, we have a letter from Rev. Walter Colton, Alcalde of Monterey, to the editor of the Journal of Commerce of New York, written on the 29th August last, and the *Californian*, newspaper, of September 28th, 1848, published at San Francisco, which contains statements prepared apparently with care, and with a view to circulation abroad.

But we have not only accounts of gold—we have the gold itself to see, and handle, and assay.* Lieutenant Loeser, of the 3d artillery, and Mr.

* For an official account of an assay of \$36,492 worth of this gold, made at the United States Mint, see the letter of R. M. Patterson, Esq., Director of the Mint, addressed to R. J. Walker, Secretary of the Treasury, in a subsequent part of the present number of this Magazine.

David Carter, who went out to California early in the war as a government agent, arrived at New Orleans by the way of Playta, in Peru, and of Jamaica, on the 3d of November last, having left Monterey on the previous 30th August. Lieutenant Loeser was the bearer of Governor Mason's despatch. He brings, besides, 230 ounces of gold, a mixture made up of samples from various parts of the gold district, and also seven specimens in single pieces, from one to five ounces in weight.

Finally, the discovery is announced by the highest official authority in the President's Message of December 5th, 1848, and is made the basis of a recommendation to Congress of the establishment forthwith of a mint in California. The President dwells, naturally, with much satisfaction upon these brilliant developments. Cortes himself did not dilate upon the treasures of gold which his Mexican victories poured into his hands with greater complacency, although his language may have been less restrained by the moderation of modern official decorum, than that with which our chief magistrate dwells upon the golden results of the second conquest of Mexico.

In truth, the real El Dorado seems to have been reserved for men of another age and race than that of Cortes. The hopes which brought the adventurers of Portugal and Spain to the New World in quest of a land of gold, were not destined ever to be literally fulfilled. The many ornaments of gold which Columbus and the voyagers who followed him saw upon the persons of the Indians of the islands and of the mainland, and which they were ready to exchange for trinkets of the smallest value, kindled the wildest expectations as to the wealth of gold on the continent.

The result of their searches and their conquests was not gold, but silver; silver, however, in such immense quantities as to make up for the inferior value of the metal. The mines of Peru, worked by the Incas before the Spanish conquest, and of Guanaxuato and Zacatecas in Mexico, which in the latter quarter of the last century began to flood the world with precious metal, are of silver, although a proportion of gold is generally found in the veins of silver. Brazil, Colombia, and Chili, it is true, have always yielded more gold than silver; but taking the sum: total of precious metals obtained from both continents since the discovery of America, the proportion of gold is small, being equal to only about one-forty-sixth of the value of silver, and justifies the general statement that the mineral wealth of America has *hitherto* consisted in silver. From January, 1772, when the increase in the silver mines of Mexico began, to 1800, the value of silver coined at the city of Mexico was \$696,107,230. The value of gold coined was \$28,337,686.

But the treasures of California are gold, not silver. In several of the letters lately received the writers speak of the gold *mines*. This is a common use of the word. It is silver that generally occurs in veins, and is mined. The shafts of the Mexican mines descend to a great depth, the veins running at an angle of 45°. Gold is commonly found in particles, of greater or less fineness, in dust, grains, and in pieces sometimes several ounces in weight. It is washed from the sand or earth as in the auriferous beds of sand in Siberia and the Ural Mountains, or dug from the earth, or cut from the rock. This difference was familiar to the author of the Book of Job. He says:—"Surely there is a vein for the silver and a place for the gold, where they fine it."—Ch. xxviii, v. 1.*

* See Jacob's Inquiry into the Precious Metals. Vol. I., p. 5.

With the gold itself before our eyes, and with the respectable witnesses whom we have arrayed to bear us company in our illusion, if illusion it be, we proceed to throw together the leading facts relating to this great discovery, and to form such conclusions as to the amount produced, and likely to be produced, the extent of the gold region, and the immediate and ultimate effects of this addition to the mineral wealth of the country and the world, as the accounts received thus far furnish ground for.*

In the first place it will be well to get some idea of the district of country in which the treasure is found, to find the precise local habitation of the "golden joys," to fix the metes and bounds of the happy valley.

Two ranges of mountains traverse the territory of California, approaching each other towards the south, but diverging towards the north, the one branching off to the north-east, the other, the Sierra Nevada, running north-west, and parallel to the coast of the Pacific. Between the two lies the great Basin of California, a waste of sand, it is supposed, unexplored by white men, and which the reports of the few Indians, who lead a precarious existence upon it, represent as barren and dry. It is described by Fremont as more Asiatic than European in its appearance. Perhaps further exploration will complete the resemblance; and as the steppes of Asia, and the Ural Mountains to the west of them, abound in auriferous sands, our own Sierra Nevada, in which gold has just been discovered, may prove the western boundary of another great golden desert. Between the Sierra and the coast there is another and lower chain of mountains called the Coast Range; and between the Coast Range and the Sierra Nevada lies the valley of the Sacramento, some one hundred and fifty miles long, and varying from twenty to fifty miles in breadth. Through the whole length of this valley runs the River Sacramento, whose head waters are to be found somewhere in the neighborhood of the lofty Mount Shasta, in lat. $41^{\circ} 30'$ N., about one-half a degree south of the former boundary line between the United States and Mexico. The Sacramento running south-east, parallel to the ocean and the Sierra, and receiving the waters of several branches, all of which enter it from the east, flowing from the Sierra, and the chief of which are the American, Feather, Cosmenes, and the St. Juan, pours its waters into the noble bay of San Francisco. The American River taking its rise in the heights of the Sierra, which here range over 9,000 feet above the level of the sea, first rushes down, a torrent rather than a river, through rocks of white granite, which prevail in both ranges, and through forests of pine, a species of which, called *pinus colorado*, abounds on the heights; reaching the lower ground, it flows with a width of about one hundred yards, through a valley of exquisite beauty, in which are found the white oak and cedar, and enters the Sacramento at a point about fifty miles from its mouth. The entire

* A letter has been published by a chemist of the city of New York, Mr. E. Kent, giving the results of assays made by him. Without throwing any discredit upon the well authenticated statements which have been received of gold being found in the valley of the Sacramento, it may furnish a clue to the almost incredible character of some of the statements. He says that he examined two specimens of the metal, one from the district called the "dry diggings," the other from the river sand. The former, of a bright yellow color, in flakes, proved gold fully of the average quality; the latter, in grains, of a darker yellow, proved—not gold at all, but a copper ore. While, therefore, we do not deny the existence of gold which our eyes have seen, it may be well to look out for an admixture of dross in some of the golden stories. At any rate, the estimate we see in one of the daily papers of \$10,000,000,000 in four years, is a little too much in advance of the mail.

course of the American was traced by Col. Fremont in 1844, from its rise in the pass of the Sierra, to its mouth. The character of the rock in the valley of the Sacramento is described as volcanic.

At the mouth of the American River stands New Helvetia, founded by Captain J. A. Sutter in 1839. Captain Sutter, a Swiss, formerly an officer in the army of Charles X., obtained from the Mexican government a grant of thirty leagues square at this point. Here the river is about three hundred yards wide. Sutter's Fort is considered the head of navigation in the dry season. Above, the banks are marshes for miles back, and overgrown with the tula, a species of bulrush. The face of the country is uneven. Between the coast and the Coast Range is a high and level plain; east of the Coast Range occur numerous ridges with intervening valleys and ravines, whose prevailing direction is north and south, but which are interrupted by hills and valleys in all positions.

It is in this region, on these heights, and in these valleys, that thousands of our fellow republicans, of all bloods, breeds, and creeds, Indian, Meztizo, Spanish, German, and Anglo-Saxon, Catholics, Protestants, and Mormons, are realizing the luck of Sindbad the Sailor in the Valley of Diamonds, who had but to put forth his hand to clutch with his fingers the treasure lying palpable on the ground before him.

We owe the discovery neither to the enterprise of capital, nor to the sagacity of science. It was a pure accident. Gold, it is true, was long ago found in the district of Sonora, at Pimena Alta, in lat. 31° N., about two degrees south of the river Gila, the present southern boundary of our territory. A piece weighing several ounces is said to have been found there in alluvial soil, about eighteen inches beneath the ground. Small quantities also had been found in Oaxaca. It was known, also, that gold had been obtained in the Mission of San Fernando, south of Monterey, but the region had ceased to be worked for want of water. Some accounts state that the Mormons had discovered gold at the great Salt Lake, on their way to California, and Col. Mason reports that they had returned thither, probably to search for it, as there was no other assignable motive for such a movement.

The region of the Sacramento had been repeatedly visited by men of science; by Captain Wilkes in the course of the exploring expedition, by Col. Fremont in 1844. The latter mentions seeing Indian squaws pulling up tufts of common grass to eat, near the banks of American River. The roots of the sweet onion were pulled up for food by one of his companions, who wandered for several days among the neighboring woods. But neither Indian nor White man was so fortunate as Diego Hualca, when he pulled the shrub with a silver root at Potosi. No ornaments of gold seem to have been worn by the Indians; in short, there was no suspicion of the existence of it in the valley of the Sacramento, until the occurrence of the circumstances we will now narrate.

Fremont speaks of pines on the heights of the Sierra Nevada ten feet in diameter, and of a cedar twenty-eight feet in diameter. Captain Sutter lacked lumber, and in the fall of last year contracted with Messrs. Marshall and Bennett for the erection of a mill for sawing pine timbers on the American River, fifty miles above its mouth. In the winter and the spring of 1849, the mill and dam were completed. In constructing the tail-race, Mr. Marshall, in order to carry off the loose earth and stone, and to increase the width of the race, allowed the water to flow with full

force through the race, at the foot of which a bank of mud and sand was thus accumulated. Early in February, (according to the Californian of September 27th, on the 10th of February, 1848,) Mr. Marshall, while walking along the race toward the deposit of earth, noticed glittering particles lying on the edge. He was not long in doubt as to what they were. He communicated the secret to Captain Sutter, but secret it soon ceased to be. The news spread like magic. The workmen deserted the mill for the mill-race.

At first the reports were barely credited at San Francisco. Now and then a solitary believer, half ashamed of his credulity, would steal off to a launch and make across the bay for the mouth of the Sacramento. In May, the gold itself began to come into the town. And then began the rising and the rush. All classes and all pursuits, all races and both sexes, traders and tavern-keepers, lawyers, editors, and printers, sailors from men-of-war, sailors from whaling vessels, deserters from the military stations at Monterey, San Francisco, and Sonoma, the disbanded volunteers of the New York regiment, *not* without their colonel, men with pickaxes, spades, shovels, and knives, with willow baskets and tin pans, women with the indispensable tea-pot, whole families with their teams and household goods, all swelled the mighty procession to the valley of gold. Business of any kind but the literal getting of gold, and in any way but literally picking it up, is at a stand-still. Only women are left in the towns, which are said to look as if nature knew no other sex.

Governor Mason's proclamation of July 25th, was issued in consequence of the desertions. He calls upon the soldiers to return to their duty, and in case they are harbored by the people in the gold district, he threatens to take military possession. The greatest part of the region thus far explored is public land.

Meanwhile the hitherto quiet valley of the Sacramento has gained in life all that the seaports have lost. Tents and bush-arbors are pitched on the banks of the rivers. On the American, the Feather, and the Cosumenes, thousands are busy in digging and washing the earth and sand. On the hills, and in the valleys and dry ravines also, it is found. It is cut with knives from the granite rocks. The metal, it is said, is found in "three distinct deposits; sand and gravel beds, on decomposed granite, and intermixed with a kind of slate." It has been found at a depth of eighteen inches from the surface. Whether it all lies near the surface, or how much deeper it descends, we have as yet no means of judging.

Of course there has been no time for procuring any but the simplest implements; the spade to loosen the earth, the tin pan and the basket to shake it in, and with water to wash the gold dust and grain, and knives to detach the particles from the rock. The only contrivance complex enough to be dignified by the name of "machine," or "cradle," is a trough hollowed from a tree, or made of boards, about ten feet long and two wide, and placed on rockers, with a sieve at one end and open at the other, and into which the earth is thrown. Water is poured upon the earth, the trough is rocked to and fro, and the earth washed out with the water at the lower end, the gold grains mixed with sand remaining at the bottom, being prevented from running out with the water and earth by cleats about an inch high, nailed at intervals across the hollowed bottom. This machine requires four men to work it; one to dig the earth, another to carry it to the cradle, a third to pour water, and a fourth to

rock. For a machine of this kind Mr. Larkin gave \$120 in gold dust. He states that common spades worth a month before one dollar, brought ten on the 1st of June.

As to the extent of the gold region of California, and the amount of gold obtained, or likely to be obtained, we have as yet, of course, no very definite information, and can therefore come to no conclusion as to the amount which will be added to the supply of precious metals, and the consequent effects which will be produced upon business and society at home and abroad.

There are two considerations connected with this discovery, which, to our minds, are specially satisfactory. We rejoice, in the first place, that the El Dorado was revealed not to adventurers, actuated by no other motive than the vulgar lust of gold, and carried thither by the hope of easy gains, but to the hardy emigrant, who went out to make, not find fortune, and whom fortune has found; to the citizens of a republic ready to labor with their own hands, rather than compel the Indian and Negro to undergo unrewarded toils.

We rejoice, also, that the treasure is gold, not silver. Silver, being found in veins, often descending deep into the earth, and requiring shafts of great length to be sunk, cannot be procured without large outlay of capital. In the mines of Mexico the veins descend at an angle of forty-five degrees, and the ore is brought up on the backs of the laborers, through passages many feet in length. But gold is found in small particles, is washed from the sand of the plain and of the river, is cut from the surface of the rock, and requires less capital than silver. The reasons are obvious, therefore, why the government of Russia adopts a different system with its silver mines from what it pursues in regulating the gold regions. The silver mines are worked by the crown itself. But any private individual may make application for an allotment of unappropriated ground in the sand plains of Siberia. He obtains his allotment free of rent, and works it at his own expense and his own risk. The gold obtained is sent on to St. Petersburg, and after a deduction of 15 per cent for government dues, the balance is returned to the owner.

The gold region of California is the property of a Republic. It is held for the benefit of the people. A policy less liberal than that of Russia would neither be compatible with the nature of the subject and the interests of California, nor with the spirit of our institutions.

Governor Mason recommends the renting, for a limited period, of allotments of a few yards square, or the sale of the land at auction, in lots of from 20 to 40 acres. Whatever course is pursued, whether the land be sold or leased, we trust that no system will be introduced to impair the facilities or lessen the chances which the region affords to men of small means. As it is, the laborer is now the capitalist in California. With his food for a month, a bush-arbor to sleep in, and a few tools, he is ready to go to work on his own account. The capitalists who have gone to the ground with laborers, have not, it is said, been able to retain them in their service, each being eager to begin operations for himself. Of course the co-operation of intelligent men and better methods will lead to more profitable working of the ground, but there is no room for the exclusiveness and monopoly of capital. Let the necessary regulations be adopted, under a territorial government, for the preservation of peace and order; let a mint be established, and such a land system introduced as will give

all a chance, and we vouch for it, that California will be more quickly peopled, and the amount of gold obtained will be greater, than if any other course is pursued.

A few details will give some idea of the amount of gold obtained. In Mr. Larkin's letter of June 1st, he states that \$20,000 had been received in exchange for goods at St. Francisco; that one man in the gold district averaged \$25 per day. Writing on the 20th, he supposes that there were 2,000 men at work on the American, Feather and Cosmenes rivers. Fifty men, at one point, obtained in May and June an average of \$1,000 each.

Governor Mason, in his report of 17th August, states, on the authority of Mr. Marshall, that the searchers obtained from 1 to 3 ounces daily. At Weber's creek, two ounces were the daily yield. At Feather river, Mr. Dye, with fifty Indian washers, in seven weeks and two days, obtained 273 pounds, his nett share of which was 37 pounds. A soldier absent on a furlough of twenty days, returned with \$1,500, the fruits of one week's search. A party of four averaged \$100 per day. Gold was sold at \$12 an ounce, and was worth \$16 in trade. Col. Mason estimates the number of men on the ground at 4,000, (of whom one-half are Indians;) the total yield per day \$30,000 to \$50,000. A small ravine was shown him from which \$12,000 had been taken. Hundreds of similar ravines were yet untouched. Those that had been worked were little more than scratched. No serious impression had as yet been made. Gold was believed to "exist on the eastern slope of the Sierra Nevada," and there was every reason to believe that in the space of 500 miles, between the region of the Sacramento and the mission of San Fernando on the south, of which *Puebla de los Angeles* is the chief town, there must be many rich deposits.

If our suggestion, that the great basin of California, east of the Sierra, possibly contains auriferous sands like those of Siberia, who shall attempt to estimate the amount of precious metals which within a few years will be added to the present supply?

In his letter of August 29, Mr. Colton states, that the district already explored extends 200 miles north and south, and 60 east and west. And every day, new explorations extended the area. Some searchers averaged ten ounces a day, the least active one or two. Four men in ten days obtained \$1,500 each. Another obtained $2\frac{1}{2}$ pounds of solid gold in fifteen minutes from a basin of rock not larger than a wash bowl. These instances were cases of men whom he personally knew. He estimates the yield at over one million of dollars, a month.

In the Monterey letter of September 10, the writer calculates the amount of grain gold received per month, at over two millions of dollars. People carried the gold dust around in goose quills, for change. Public meetings had been held to consider the subject of a mint. Gold was being shipped off to Mexico, Chili and Peru, to be coined. The writer thinks about 4,000 persons were in the gold region at the time.

The Californian of the 28th September states the receipts of gold dust at St. Francisco to have been, during the first eight weeks of searching, \$250,000; during the eight weeks ending on the 28th, \$600,000. The number of persons engaged probably exceeded 6,000, including Indians. One ounce in a day was the lowest average for each. It was "fully ascertained that gold exists on both sides of the Sierra Nevada, from latitude 41° north, as far south as the head waters of the San Joachin river, a distance of

400 miles in length and 100 in breadth." The gold region already explored was sufficiently extensive to give profitable employment to 100,000 persons for generations to come.

It will be seen that these statements indicate a monthly product of one to two millions of dollars.

Some of the immediate effects of the publication to the world of these brilliant accounts are sufficiently obvious. Already hundreds are preparing to leave the Atlantic seaboard at the first opportunity. Ships with cargoes for the California market have already sailed. Flour is said to be selling there at \$36 a barrel, and wisely, therefore, does Captain Sutter, while others desert their wheat fields for the gold *placer*, quietly continue the cultivation of his lands.

Of course a great impulse will be given to emigration. California will need a territorial government immediately, and Congress will doubtless make provision for a mint at its present session.

Of the ultimate effect upon business and monetary affairs at home and abroad, it is yet too early to speak. Those who talk of ten hundred millions added to the supply of precious metals within a few years, may possibly be right, are probably a little extravagant. We have not the data to confirm or refute.

An increase of currency causes a rise of prices; because, the amount of commodities remaining the same, there is more money to represent them. Such is the effect of large issues of bank paper, and an increase of metallic currency is in this respect the same. But while paper money rests upon credit as its basis, gold and silver coin, which lie at the foundation of that credit, are self-sustained, and a rise of prices arising from an increase of metallic currency is more natural and healthy. If, the quantity of precious metals remaining the same, there be a large increase in commodities produced and exchanged, the effect is the same as a decrease of precious metals. It is stated, that during the hundred years following the discovery of America, the quantity of precious metals was increased four or five fold. The consequence was an increase of prices at the same rate. The pious Catholic of England attributed this, probably, to the change of religion, and hence, we presume, the complaint of the old song, that,—

" Or 'ere the vriers vent 'ence,
A bushel of the best wheat was sold for fourteen pence."

When Mr. Jacob wrote his "Inquiry into the Production and Consumption of the Precious Metals," in 1831, he came to the conclusion that the quantity of them was decreasing, that the supply of gold and silver was growing less, while the production of new values was greater every day, and that, in consequence, a gradual decline of prices had been going on during the twenty years preceding.

Twelve years before Mr. Jacob wrote, a discovery had been made of auriferous beds of sand in the Ural Mountains; and two years before, similar beds were found in the plains of Siberia.

The product was comparatively small at first, so small as to receive hardly a passing notice from Mr. Jacob, but of late it has increased rapidly, enormously. In 1846, the gold region of Russia yielded 1722 poods of 36 pounds each, or 61,992 pounds, being more than one-tenth of the entire amount obtained since 1819. The silver mines, also, worked by the crown, are very productive. All remember the relief afforded by Russia

to the Bank of England, in the crisis of 1847. That power bid fair, through her precious metals, to assume as controlling a monetary as political position. But if the accounts from California are no more than half confirmed, the Great Republic will soon be placed on an equal footing, at least, with the Great Empire.

The effect of streams of the precious metals pouring into the channels of trade from both east and west, would seem to be, inevitably, a rise in prices, and a consequent impulse to industry and enterprise. Such doubtless would be the immediate result. But as a commodity falls in value as its quantity increases, while prices nominally rise, the coin in which they are paid is depreciated. While more is given for what is bought, more is received for what is sold, and the account seems balanced. Apart from the impulse given to industry and enterprise, the chief benefit of a rise of prices from an increase in the supply of precious metals, would probably accrue to those whose incomes exceed their expenditures, and to those who have old debts to pay, and at the same time the holders of mortgages at a fixed rate of interest would lose.

If, as has been supposed, the supply of precious metals has been falling off, possibly as large an amount as was likely to be received from Russia and all other sources heretofore known, would be no more than enough to maintain the balance and prevent a decline of prices. On the other hand, what an enormous production of new values in every direction has been taking place within the last half century. Emigration has been sending forth divisions of the peaceful army of civilization to the uttermost parts of the earth : to Australia, to Brazil, to Oregon, to the Indies. The steam-engine has been at work, spinning, weaving, forging. Within twenty years, railroads have been introduced ; within ten years, ocean steamers ; within five years, the electric telegraph.

We believe that at no period more momentous, more opportune than the present, could a large addition, a very large addition to the supply of precious metals be made. A great work is to be done, not by the arm of despotism, like that which built the pyramids, but by the arm of enterprise, and the power of credit and of money. The great system of steam communication on land and on sea, which has but made a beginning, is to bring nations into near neighborhood, and bind the ends of the continents together. The steam-engine is to spin and weave for the world. For all this gold is needed. Gold to represent the new values, created and to be created, the new commodities produced, and give them circulation ; to displace paper, if possible, if not, to become the broader and safer basis of a larger paper currency. Like the air we breathe, which, while it yields no nourishment to the body, imparts energies without which food would do no good, the precious metals, losing their own intrinsic value when used as a currency, represent and give circulation to all other values.

More gold then, say we. It brings its temptations ; it brings also the means of great good, of glorious results. If we fear or hate it, why confine our maledictions to the poor yellow ore alone ? The only gold is not that which glitters. Food, raiment, is gold in another form ; all that is without us, that may be bought and sold. Food itself is not more needful to the body, than an enlarged and safer currency to the growing enterprise of the world. They who dwell upon commonplace and out of place warnings, applicable to other times and circumstances, mistake the spirit and men of the age.

ART. VII.—PROTECTION OF SHIPS FROM LIGHTNING.

To FREEMAN HUNT, Esq., Editor of the Merchants' Magazine, etc.

IN the June number of the Merchants' Magazine for 1846, I made some remarks in reference to the protection of ships from damage by lightning. In that communication I stated that in 1839 a commission was instituted by the Parliament of England to inquire into the cases of damage by lightning to vessels in the service of that government. That commission was for a long time engaged in this service, and made an elaborate report, in the conclusion of which they say, "*And no instance, so far as we are aware of, has ever occurred of a ship sustaining injury when struck by lightning, if the conductor was up at the masthead, and the continuity uninterrupted to the water.*"

I also included in that communication a copy of a letter addressed to me by the Hon. David Henshaw, Secretary of the Navy, dated Navy Department, August 2d, 1843, in which he says:—"None of our ships have ever been injured by lightning if the conductors were up."

That communication contained a list of vessels injured and of vessels destroyed by lightning, as registered by me in 1841, 1842, 1843, 1844, and part of 1845. I will continue the record in my next communication for the residue of 1845, 1846, 1847, and 1848.

I have been informed by John A. Stevens, Esq., President of the Bank of Commerce, that during the time his father, General Stevens, was navy agent at New York, a vessel arrived in the bay from the Brandywine Mills loaded with gunpowder for the government. The tide was not favorable for the vessel to proceed up to the powder house, and they anchored it in the bay. General Stevens sent on board to ascertain if the vessel was furnished with a lightning conductor, and was informed that there was no lightning rod on board. He immediately sent a rod to the vessel and ordered it put up. In two hours after the vessel was struck by lightning, and the lightning passed away on the rod.

During the last two years, I have called frequently at the office of the Atlantic Insurance Company in this city, to converse with the very intelligent officers of that company in reference to the extra hazard which vessels run by neglecting to provide lightning conductors to the ships. Since the first call I made at that office on the subject, the company have paid near \$30,000 losses to ships and their cargoes by lightning.

Iron ships are never struck by lightning, and steamboats rarely struck, and when struck are but little injured. One thousand dollars would probably cover all the damage by lightning to steamboats since the introduction of steam navigation, and not one life has been lost on board a steamboat by lightning.

These facts are too plain to require comment. I have never heard of a case of loss of human life in a vessel or building furnished with a lightning rod, reared for the purpose of protection.

I have never heard of a warehouse filled with iron being struck by lightning. A store in Rochester, containing some iron, was struck by lightning. During the present year, my investigations of lightning phenomena have brought to my notice some facts that deserve particular mention.

Some years since the packet ship New York, bound from New York to Liverpool, was struck by lightning. The lightning entered the cabin and

stopped all the chronometers, and also all the watches but one, and that was thrown upon the carpet. On the arrival of the ship at Liverpool, the chronometer was sent to Messrs. Roskells to be put in order. The steel works were found to be converted to magnets, having been thoroughly manipulated by the lightning.

A silver watch hanging up in a house in New Orleans was struck by lightning, and the steel works were thoroughly manipulated and converted to magnets, and had to be all taken out before the watch could be repaired.

Heating these steel works to redness would divest the steel of its magnetic properties.

On the 19th of June, 1848, a terrific lightning storm passed over Trenton, New Jersey. The rolling mill and furnace belonging to Peter Cooper, Esq., of New York, contained at that time about 2,000 tons of iron, some of which was in a fluid state, some heated, and the residue cold. There were 200 to 300 men in the works at the time. As the lightning storm was passing, one of the workmen was probing the melted metal in the furnace with an iron stirrer, and received an electric shock from the melted iron. Another workman attempted to lower the iron damper by laying hold of the chain, and received a shock which knocked him down. A second took hold of the chain and shared the same fate; a third laid hold of the chain and received a severe shock.

In the summer of the present year, the shop of a blacksmith in Oswego county, New York, was struck by lightning; the blacksmith at the time was holding a piece of red hot iron in the forge with a pair of tongs. The hot iron was vivid with brilliant scintillations, and the blacksmith was raised from the floor several inches by the shock, communicated from the hot metal through the tongs.

These cases of magnetic manipulation by the lightning, and of absorption of electricity by red hot iron, are wonderful and very instructive, and future observations in relation to this phenomena may lead to important results.

In 1846, 1847, and 1848, several vessels and their cargoes have been destroyed by lightning, viz :—The ship *Oscar* was burnt by lightning in Port of Spain, September 15, 1846; the packet ship *Thomas P. Cope*, bound from Philadelphia to Liverpool, was with her cargo burnt by lightning November 29, 1846; the ship *Christopher Columbus*, bound from New Orleans to Havana, burnt by lightning February 11, 1847; the British ship *Columbia* was sunk by lightning June 14, 1847; an American ship with her cargo burnt by lightning on the French coast in the autumn of 1848; brig *Rebecca C. Fisher*, bound from Apalachicola to New York, was with her cargo burnt by lightning April 19, 1848. The English brig *Bayfield*, with a cargo of gunpowder and spirits, was burnt by lightning on the western coast of Africa on the 25th of November, 1845. The brig *Columbia*, when near the south-west pass of the Mississippi, was struck by lightning on the 3d of July, 1846, and set on fire, six of her men who were aloft reefing topsails were knocked into the sea and lost, and the captain was the only person saved on board. The ship *Huguenot*, of 1,000 tons burthen, bound from New Orleans to Liverpool with a cargo of cotton, was struck by lightning June 12, 1846, the cargo set on fire, and she had to put into Savannah to extinguish the flames. The ship *Independence*, bound from London to New York, was on the 14th of January struck by

lightning twice during one hour, in latitude 49° north, longitude 23° west, six of her men were knocked down and two disabled. The pilot schooner *Four Sisters* was sunk by lightning on the first of July, 1848. This vessel was afterwards raised and repaired. The *Thomas P. Cope* lost one person by suffocation, the *Christopher Columbus* one person by exposure, the British ship *Columbia* four men by being drowned, and the brig *Columbia* six men knocked into the sea, and English brig *Bayfield* three men by starvation and exposure in an open boat to escape the flames. The ship *West Point*, on a voyage from Liverpool to New York, was struck seven times by lightning during thirty minutes, on the 29th of February, 1848. She had 300 passengers on board. Two of her men were instantly killed by lightning. I will omit the residue of the catalogue for my next communication, and here append the particulars of the burning of the *Thomas P. Cope* by lightning, as follows:—

"SHIP *THOMAS P. COPE*.—One of the crew of this vessel informs us, that the day on which the ship was struck by lightning, the wind was fair and blew strong from the north-west until about 4 P. M., when the sky became obscured with dark and heavy clouds, threatening a storm. In half an hour afterwards, all hands were called to shorten sail, which they continued doing until the ship hove to under a close reefed maintopsail, the wind blowing a gale, accompanied with hail and snow, thunder and lightning. About half past 6 P. M. the ship seemed wrapped in fire for an instant, when an explosion loud and terrible shook her fore and aft, and left the eyes of the main rigging on fire. The electric fluid exploded on the main cap, then darted along the maintopsail sheets into the hold, and probably was conducted through the sides of the vessel by some of the copper bolts.

"Men were immediately sent aloft and water passed to them to put out the fire, but before they could effect their purpose the rigging was consumed and the mast began to totter; therefore, in order to save themselves, they descended to the deck again. The lanyards of the weather rigging had been cut, and as the vessel rolled to leeward, the mast went over the side about four feet above the deck, without having been cut away. It took with it the mizzenmast close to the rigging, and all the after yards, and also carried away the foretopmast yard. The foresail, which had been blown away while shortening sail, was replaced by bending a foretopmast reefed, under which the ship was again hove to, with the weather clew hauled up.

"In the meantime the passengers rushed on deck, declaring the ship was on fire below; and one poor woman, Mrs. McNeil, while saving an infant child, left below a little girl five years old, who was suffocated by the smoke! The mother's agony was heartrending in the extreme. Still the gale blew with unabated fury; the lightning flashed, the thunder rolled, and the snow and hail descended with bitter violence. The hands were employed in pouring water down into the between decks, for the purpose of extinguishing the fire; but this had no other effect than to keep it under without extinguishing it. A raft, composed of studding-sail booms and other spars, was constructed, and the boats were got in readiness, whenever it should be necessary to abandon the vessel. Pouring water into the hold and pumping it out again was the principal occupation of all hands, until they were rescued by the ship *Emigrant*, as reported yesterday. The ship had not any lightning conductors on board!! The captain saved his chronometers, instruments, and clothing, and the crew a part of their effects; but the poor steerage passengers lost their all, and are now entirely destitute, and are worthy objects of charity."

"Some further particulars of the loss of the *Thomas P. Cope* may not be unacceptable to your readers. These I learned from Mrs. L., of Philadelphia, who, with her four little children, were cabin passengers on board the unfortunate vessel. The ship was struck by lightning on Sunday, the 29th ult., at 6½ P. M., at which time most of the passengers had retired, or were about doing so. The mainmast being the attraction, it was instantly on fire, while at the same time the fluid descended into the hold, and communicated itself to the combustible cargo. A scene of terrible confusion at once commenced, which was, however, speedily quieted by the cool and decided conduct of Captain Miercken. The mainmast was cut away, carrying with it the mizzenmast and everything forward but the stump of the foremast. The steerage passengers were got upon deck, though in such haste they were unable to save their clothing, and many were thus exposed to the storm in their night dresses. So great was the haste necessary, that one little child was forgotten before the hatches were caulked down, that the flames might, if possible, be smother-

ed. All the other passengers were eventually saved. Every precaution was used to keep the flames under, but in vain. But the measures which were adopted proved successful in preserving life. The decks were kept constantly wet, and occasionally holes were bored in them and water turned down. For the first night men, women, and children were exposed to a violent storm of snow and sleet, and it would be difficult to imagine a more distressing sight than poor Mrs. L. with her infant and other children thus exposed. As soon as circumstances would permit, the women and children were got into the forecabin, though it was impossible to remain in such a crowded situation long at a time. The crew and male passengers were, of course, obliged to keep the decks day and night, and it is said that Captain Miercken, whose conduct was admirable throughout, never quitted the deck. In this situation the ship remained until the next Saturday afternoon, the decks growing hotter, thus giving evidence of the increasing fire, and threatening all with a horrible death. Several sails were seen during this time, but at a great distance. On Saturday, just as hope was giving place to despair, they fell in with the British barque 'Emigrant,' Captain Faber, bound to St. John's, New Brunswick. Although short of provisions and water, Captain Faber could not hesitate in regard to his duty. He commenced transferring them on board on Saturday evening, and when his work was half done, darkness and a gale set in. The feelings of Captain Miercken and those who remained on board may not be described. The fear that the flames would burst out upon them at any instant, and that the gale might separate the vessels, must have constantly preyed upon them. But the dawn of morning showed their succor near at hand, and they soon joined their companions. As they left the hatches were taken off, and the noble ship was soon wrapped in flames. The conduct of Captain Faber is spoken of in the highest terms. He, with his crew, cheerfully went upon the same allowance of half a pint of water each, which was all that could be afforded to his numerous guests. A few days afterwards the Washington Irving, a Boston packet, Captain Caldwell, homeward bound, hove in sight. Captain C. cheerfully took them all on board, and supplied the emigrants with provisions and water. Captain Faber had made them as comfortable as his limited means would allow; but when on board the 'Washington Irving,' they felt, as it were, once more at home. The unremitting attentions of Captain Caldwell will never be forgotten. They were just such as every one who knows that gentleman would have expected of him, and one can scarcely conceive of a purer satisfaction than he must enjoy, in being the instrument of Providence in feeding the hungry and caring for the destitute, abundantly able as he was to do, from the liberal manner in which the owner of the Boston packets always supplies his vessels. On Sunday morning the 'Washington Irving' arrived in Boston, and I gleaned these particulars from Mrs. L. on board the boat."

None of these vessels were furnished with lightning rods. The storm which set the Thomas P. Cope on fire, passed my place of observation at from 3 P. M. to 3 35 P. M. of the 29th of November; it was a storm of lightning, thunder, wind, snow, rain and hail. My place of observation is in latitude 41° 41' 50" north, longitude 73° 59' 30" west. The storm was 35 minutes passing. The Thomas P. Cope when she was struck was about 9 degrees east, and a few minutes north of my place of observation. The length of the storm cloud was measured by the time it was going 9° east. It would give it a great length of surface, and it made great speed. The meteoric, magnetic and electric wires upon which I made my records fell during the storm 6° to 48°, then rose 3½°, and again fell to 48°. The weather that day on the mountains of south-western Virginia, 1882 feet above the sea, was beautiful, and the temperature a perfect equilibrium of 12 hours duration. The day previous an earthquake shock was felt at Porto Rico, which was doubtless the parent of this storm. At Syracuse, New York, the temperature changed but 2° for 12 hours on the 29th, and at Cobourg, on the northern shore of Lake Ontario, the weather was very pleasant. At my place of observation a sound like that of heavy thunder was heard at 3 A. M. of the 29th. Lightning storms are probably in every instance the result of earthquakes, and vessels are greatly exposed to injury and destruction by these electric discharges, and should be pro-

ected against the visitation of the fire of the clouds by metallic conductors, to lead the electric discharge from the clouds to the water.

I have heard of the case of a ship being struck by lightning which was furnished with one rod to one of the masts—the lightning struck one of the masts not protected. This was the packet ship *Louis Philippe*. Each mast should be protected.

In the communication referred to as published in the *Merchants' Magazine* in June, 1846, I include the copy of a letter received by me from *Commodore Stringham*, in which he states that the iron wire used for conductors on board of ships of the line and frigates is five-sixteenths of an inch in diameter, and for sloops of war one-quarter of an inch diameter.

My meteorological records are probably the most extensive of the kind of any kept on the surface of our globe. They embrace four points of observation, viz: on Long Island; on the mountains of south-western Virginia, 1882 above the sea, south-west; on the borders of Lake Ontario, north-west; at Franconia, N. H., north-east. My records on Long Island are made hourly, from 4 A. M. to 10 P. M., and during lightning storms every 60 seconds.

NAVY DEPARTMENT, November 17, 1848.

SIR:—Your communication of the 14th instant, upon the subject of "lightning conductors," has been received, and referred to the Bureau of Construction, Equipment, and Repair, and I have the pleasure to enclose herewith, for your information, a copy of the Report of the Chief of that Bureau in relation to the contents of your letter.

I am, respectfully, your obedient servant,

J. Y. MASON.

ESEN MERIAM, Esq.

NAVY DEPARTMENT, BUREAU OF CONSTRUCTION, ETC., }
November 16, 1848. }

SIR:—In reply to the inquiries proposed to the Navy Department by E. Meriam, of New York, and referred to this Bureau, I have the honor to state, that there is nothing on record in this office to show that any damage has been sustained by vessels of the United States from lightning since the period referred to by Mr. Meriam,* or that any steamer of iron or wood has been struck with lightning.

In this connection, I would state that the subject being one involving important consequences, and the conductors now in use on board United States ships being very imperfect, and liable to constant injury and destruction from the motion of the ship, as well as by the passage of the electric fluid, the Bureau has been for some time in correspondence with the agent of Sir W. S. Harris, patentee of the improved permanent conductor, introduced into the British navy, and that a conductor of that construction is expected to arrive shortly from England, to be examined, and, if approved, recommended for introduction into the Navy of the United States. Those in use at present are connected links from the mast-head to the water. If made of sufficient strength to bear a shock, they are so heavy as to break with the jerking motion of the ship, and become useless. Wire rope has been tried both in the British and our own service, but have been laid aside, being liable to chafe, stiff and unmanageable. The researches of Mr. Meriam on the subject of electrical phenomena, would be highly interesting as well as useful. Those of Sir W. S. Harris are in possession of the Bureau. Mr. M.'s ideas on the best form for ships' conductors and mode of application, would be received with pleasure and meet the most respectful attention.

I am, sir, respectfully, your obedient servant,

CHAS. WM. SKINNER.

Hon. J. Y. MASON, Sec'y of the Navy.

NAVY DEPARTMENT, BUREAU OF CONSTRUCTION, ETC., }
December 1, 1848. }

DEAR SIR:—I send you the copy of a letter from Commander Kelly, of the United States ship *Albany*, also a minute from the log book of the United States ship *Delaware*,

* The period referred to was the second of August, 1843. On that day Mr. Secretary Henshaw, in a letter addressed to me, says:—"None of our ships have ever been injured by lightning if the conductors were up."

Protection of Ships from Lightning.

giving an account of those ships being struck with lightning, and the effects. In both, you perceive the conductors were destroyed, proving the necessity of improving these conductors.

I am, respectfully, your obt' servant,
EBEN MERIAM, Esq.

CHAS. WM. SKINNER,
Chief of the Bureau.

EXTRACT OF A LETTER FROM COMMANDER JNO. KELLY, U. S. NAVY, TO COMMODORE C. W. SKINNER, DATED PHILADELPHIA, NOVEMBER 20, 1848.

"On the 4th of September, 1848, in latitude 25° N., longitude 80° W., during a heavy squall of wind and rain, the Albany was struck twice, at an interval of about one minute. The first shock was received by the forward conductor, the second by the main.

"In reply to your interrogatory, Were the conductors rigged in the usual manner when the accident occurred? they were.

"Secondly. Did they receive and conduct the fluid off safely? I reply, they did; no part of the spars or ship receiving the slightest apparent injury.

"Thirdly. Were the conductors injured any way by the shock? The forward conductor was literally torn to pieces, from the lower end of the spindle down, scattering the fragments abait the mainmast, the greatest portion of it, however, going overboard. The main conductor sustained the shock without any apparent injury, conducting the fluid off safely.

"To the fourth question, Were the metallic points at the masthead fased, or otherwise injured? I reply, they were reported to me as uninjured by Lieutenant Gibson, the first lieutenant of the ship.

"The conductors were composed of straight pieces of iron wire about 15 inches long, connected by rings 1½ inches in diameter, the whole conductor made from ½ wire."

EXTRACT FROM THE LOG BOOK OF UNITED STATES SHIP DELAWARE.

"*Delaware, at sea, May 11, 1843.*—At ten A. M. squally from the northward, with thunder and lightning and rain. The lightning struck our fore conductor, shivering it to pieces, but did no other damage."

These two cases, the Delaware and the Albany, present the same results as that of the packet ship New York on the 19th of April, 1827, in its second shock. A passenger on board that ship gave a detailed account of the lightning shock, as follows:—

"PRINCE'S DOCK, Liverpool, May 12, 1827.

"The operation of the second shock was very different from the former, and is more deserving of attention, as furnishing a new instance in proof of the efficacy of lightning conductors as a protection at sea. We had a chain conductor on board, but it not being the season to expect much lightning, and the first shock coming on quite suddenly, it was not up at the time. The morning squall was over. It continued; however, to blow fresh all day, and about noon heavy clouds began to gather in on every side, rolling their volumes apparently among the rigging. We had reason to expect more lightning; the conductor was prepared, and Captain Bennett ordered it to be raised to the main royal mast head. It consisted of an iron chain, having links one-fourth of an inch thick and two feet long, turned with hooks at each end, and connected by rings of the same thickness and one inch annular diameter. The chain was fastened to a rod of iron half an inch thick and four feet in length, with a point well polished and tapered, in order to receive the fluid with facility. It was secured to the main royal mast, the rod extending two feet above the mast head, and thence it was brought down over the quarter, and repelled by an oar, protruding say ten feet from the ship's side, and sinking a few feet below the surface of the water. I have been thus particular in stating the dimensions of this chain for the double purpose of conveying some idea of the force of this shock and of impressing the necessity of providing larger conductors. The chain, however, in this instance performed its office, and it was up in a happy moment to avert a blow, that, in the opinion of all on board, must have sent this staunch ship in an instant to the bottom. At two o'clock we were astounded by another shock like that in the morning, the flash and sound simultaneous. I happened to be in the cabin with another passenger. A ball of fire seemed to dart down before us, at the same moment the glass of the round house came rattling down below. Those on deck agreed that the whole ship appeared to be in a blaze, from the vividness of the principal flash, which they distinctly saw darting down the conductor and agitating the water. All parts of the ship, as before, was filled with smoke smelling of sulphur. The ship was again thoroughly examined. The conductor had been rent to

pieces by the discharge, and scattered to the winds. Small fragments were found on deck. In saving the ship it had literally yielded itself to the fury of the blast. The pointed rod was found to be fused and shortened several inches, and covered over with a dark coating. Some of the links have been snapped off, and others melted. The whole operation was singularly striking, and affords another of the rare cases where the conductor yielded to the violence of the shock, while it effectually averted the shock from the object it was designed to protect."

These cases do not alter in the least the position I have assumed, that in no case has there been loss of human life in a vessel or building having the appendage of a metallic lightning conductor *reared for the purpose of protection.*

It is a serious matter for a vessel to be without a rod to each mast, and if one of these is carried away by lightning, another, or others, should be kept in store to replace the one destroyed. The same provision that is made as to spare spars, should be made in regard to spare lightning rods.

Permanent conductors are valuable beyond all question, and the greater quantity of metal in them the better the security. A vessel built entirely of iron is absolute security against lightning—that is, no iron vessel has ever yet been struck by lightning.

I am strongly inclined to the opinion, that had the lightning chain on board either the Delaware, Albany, or New York been in a single piece, there would have been no impediment to the free passage of the electric discharge from the clouds to the sea.

I will, in another communication in the next number of the *Merchants' Magazine*, make some further remarks on this subject. E. M.

ART. VIII.—THE PRESERVATION OF VESSELS FROM FIRE.

No human foresight can prevent such occurrences on shipboard. All available means should therefore be adopted towards the extinguishment of the fire, and the preservation of lives and property.

The water valve proposed for this purpose, is a new and additional attachment to vessels of all descriptions, in inlets, bays, rivers and lakes, as well as on the ocean.

The lower piece of this valve is a cylinder of copper or other metal. It passes upwards through the bottom of the vessel, and is secured in its place by bolts rivetted; by wrought nails clinched; or by screw bolts, or any other means, fastened to a corresponding plate of copper or other metal on the inside of the planks. It is open below for the admission of water, or only covered with a grating to exclude chips, sea weeds, &c., which might obstruct the valve. This lower piece is firmly closed above by brazing or otherwise. On two of its opposite sides are two perforations, the diameters of which four conjointly, are equal to that of the outer opening above mentioned, and a little more than equal to allow for the increase of friction through the small perforations.

The cap or upper piece of this valve is also of copper or other metal, closely fitted to the lower piece above described, and having two perforations on each side to correspond in size and position with the four perforations in the lower piece; it is effectually closed at the top like the lower piece. It has a band or circular projection a little below its upper mar-

gin, forming a shoulder, by which it may be secured from being lifted up or displaced by accident. This lifting or displacement is prevented by a plate or collar adapted to the shoulder, and secured to the ceiling of the vessel or to its timbers.

This cap or upper piece of the valve has a shank of iron, copper, or other metal, one end of which is effectually secured to the top of the cap, by brazing, rivetting, or other means, for the purpose of turning it, and thereby of opening and closing the valve at pleasure. This shank must be long enough to extend through the upper deck, and be there covered by some kind of a hatch, the key of which will be always kept by the captain. The wrench in the upper end of this shank, is the means by which the cap is turned about one-fourth of a circle, and water thereby let into the hold of the vessel until the fire is extinguished. It is then turned back one-fourth of a circle for the purpose of again closing the valve, that no more water may be admitted than is necessary, and that the water so admitted may be pumped out to free the ship.

The size of the water valve cannot be specified, but may vary with the size of the vessel, and the pleasure of the owner or of the captain. The number of them in each vessel may also be varied by those circumstances. The location also, or part of the vessel in which constructed, may probably be varied at the pleasure of the parties.

In steamers they will probably be attached to one or both of the pipes passing through their bottoms, by which water is received into or discharged from the boilers. In other vessels they will be placed where supposed to interfere least with the cargo or stowage, and be least subject to injury from accident or design. Some will prefer the pump well for its location; some will place it against the bulkheads of the fore-castle or of the cabin, either within or without the partition; and some will enclose this shank in a cast iron pipe, to protect it from injury. Others may think proper to bore out one or more of the stanchions like a pump, and pass the shank through the whole length of the stanchion, taking up no room and running no risk whatever. Others may prefer that it should be inserted into the bottom just below the water line, and have the shank pass up the side, between the ceiling and the planks, to the edge of the deck. Every owner must judge for himself; and in large vessels, some valves will be let in between decks, as water will seek its own level. As they may be made more efficient and certain by extending them upwards from the bottom through the lower deck, as high as the line to which the vessel sinks when loaded, I prefer that such a water valve be attached to the pump well, either within or outside of it, and that a copper pipe be brazed to it, extending with the shank through the upper deck. To this pipe the suction hose of a fire-engine may be promptly coupled, and the engine worked by the same gearing which pumps the ship.

Although two perforations on each side of the valve are made in this model, that number is not insisted on as essentially necessary; their proportion jointly to the outer opening in the lower piece of the valve, is deemed essential in their construction; they should be rather greater in the aggregate than that of the outer opening, to allow for the increased friction.

Besides the facilities of extinguishing fires in the hold of a vessel, where no access can be had to it, because of the flames and suffocating smoke, all the means usually employed on shipboard for extinguishing fire

in the upper part of the hold may still be used with as much advantage as ever, while the water is flowing through the valve to prevent the fire from extending into the lower hold. By means of this valve a vessel may be washed out every day or two, and kept free from the stagnation and offensive smell of the bilge water, which is so prejudicial to the health and comfort of the passengers and crew. The awful diseases which sometimes originate and rage on shipboard, may be mostly prevented by such facilities for promoting cleanliness and comfort—for the preservation of health, life and property.

The fire-engine provided by law for steamers, can only work while the steam-engine works, and the stream of water which it may discharge cannot be pointed at the fire or discharged directly on it, if in the hold of a vessel filled with suffocating smoke in which no human being can live. A fire-engine with suction hose may be serviceable if kept on deck, and would there assist in extinguishing a fire between decks, while the water valve prevented its extension downwards into the hold.

It is common for merchant vessels to have a freight of gunpowder. If that vessel be furnished with a water valve, the powder may be all stowed near it, and on an alarm of fire, the water may be instantly turned upon the powder, and the immediate abandonment of the vessel be prevented—the preservation of the lives and property be probably secured. A case of fire which lately occurred in Charleston, will show the feeling of our fellow men on such occasions. A fine new schooner arrived in the harbor from Philadelphia. While steering up to the wharves, the captain ordered the hatches to be opened, and immediately fire appeared in her hold. Signals of distress were made, and aid called for from the city. Two of the engine companies went off immediately in steamers provided for the occasion, but on going near her they first hailed her and inquired of the captain whether there was gunpowder on board. When assured that there was not, they went alongside and soon extinguished the fire. Had there been powder on board, they would only have removed the crew and left the vessel to her fate. Let us suppose a cry of fire on board of a man-of-war, and that the gunner who has charge of the magazine sees that it is near him. If the magazine be furnished with a water valve, he swamps instantly the powder which surrounds it, saves the ship and her crew from certain destruction, and leaves a probability of extinguishing the flames. Ships of war should always be supplied with such a valve in the magazine.

I will not endeavor to excite your feelings as to the deplorable loss of your late noble packet, the *Ocean Monarch*. I cannot pretend to say that she and the perishing hundreds on board might have been saved by having a supply of such water valves through her bottom, but I think so. Neither can I pretend to assert that the more recent total loss of lives and property in the lamented steamer *Goliath*, on Lake Huron, could have been prevented by these water valves; but if she had powder on board as reported, I cannot doubt for a moment that all might have been saved by means of water let in by such valves.

JOS. JOHNSON.

- 1 represents a section of a vessel with the water valve entire.
- 2 represents the lower piece of the valve separate.
- 3 represents the upper piece of the valve, with the shank.
- 4 represents the plate within the planks, to which the lower piece is secured by bolts or other fastenings.
- 5 represents the collar fitting the shoulder of the third or upper piece, and secured to the ceiling by wood screws or nails.

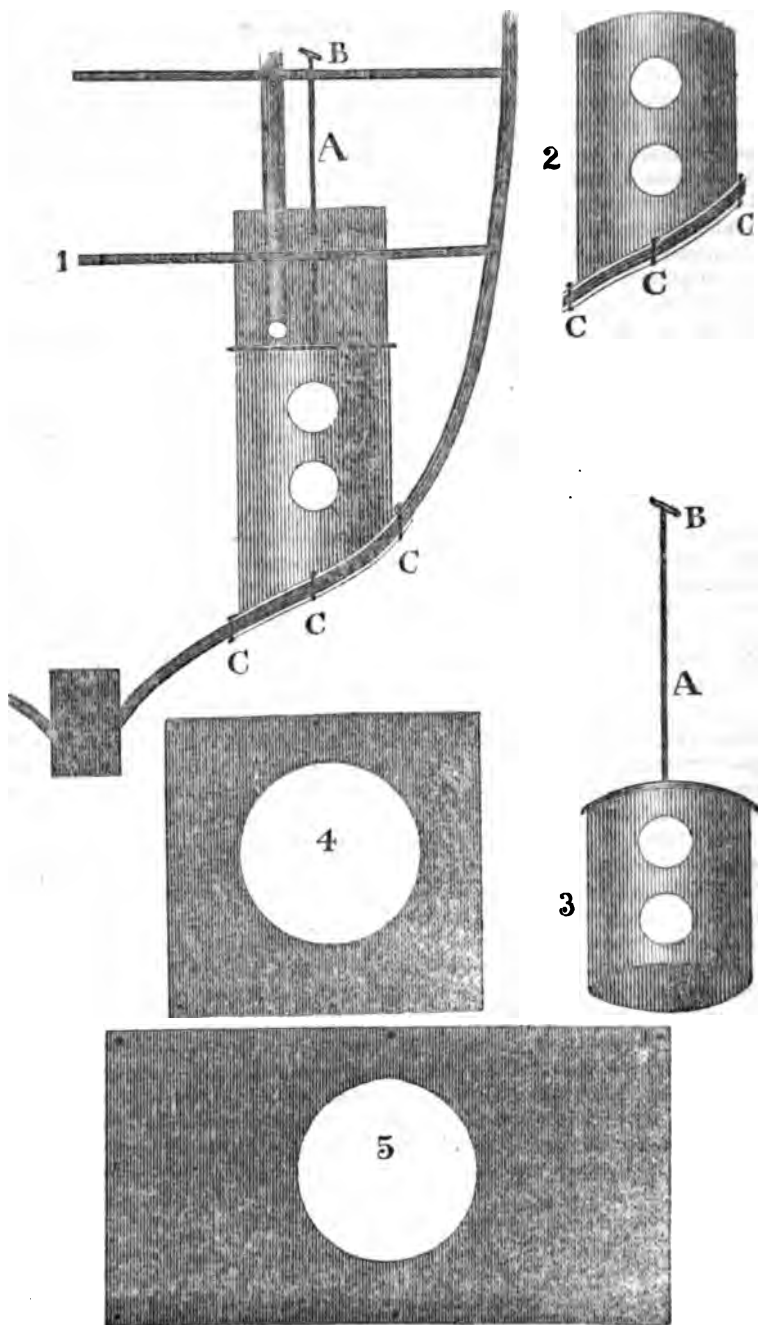
A the shank.

B the wrench by which it is turned.

C the screw bolts.

The Preservation of Vessels from Fire.

[For explanation of the following engravings, see preceding page.]



MERCANTILE LAW CASES.

CASES UNDER THE NEW CONSTITUTION OF NEW YORK.*

THIS is the first volume of a series of the Reports of our Supreme Court under the new Constitution, and in the language of the reporter we remark, that the decisions contained in this volume convey a very favorable impression of the learning and ability of the judges, and demonstrates the soundness of the principle which gave to the people the power of electing their judges.

By this volume we are made acquainted, not only with the judicial talent of our judges, but are also instructed in the method of conducting business under our new constitution. There are no cases yet reported containing the practice under the code of procedure, but many questions that arise under the recent organization of the judiciary, are discussed in the volume before us. The judges of our Supreme Court have decided many cases which are interesting, not only to the lawyer, but also to the general reader, besides some questions of international law.

One case is an exceedingly important one to our commercial community, and contains an extended commentary upon the law abolishing imprisonment for debt, and to punish fraudulent debtors. His Honor, Judge Edmonds, in delivering his opinion, says that this act has a double aspect, one as a civil remedy, and the other as a criminal proceeding. That the proceedings under the act are never for the benefit of creditors at large of the debtor, except in the single instance of an assignment after the debtor has been convicted of a misdemeanor. That the prosecuting creditor is entitled to a preference over the creditors generally, either for himself alone, or for himself and others of a certain class.

That after the rendition of a judgment against a defendant, it is not necessary that he should be guilty of any fraudulent or criminal conduct to entitle a plaintiff to a process of arrest; but that if the defendant, in violation of law or in contravention of the statute, withholds payment of a judgment or decree rendered against him, though he may make an assignment of all of his estate, *bona fide*, to all of his creditors, yet the plaintiff is entitled to a prior claim over creditors who have not obtained a judgment, and the debtor will be committed unless he yields possession of his property to the plaintiff in payment of his judgment. We notice, also, another decision in the matter of Bruni.

This was a case arising under the treaty between France and the United States, in relation to the apprehension and delivery of deserters from French vessels in ports of the United States.

The defendant or prisoner was arrested upon the request of the French Consul in New York, as one of the crew and as a deserter from the French steam vessel called the Philadelphia, then in port, on a voyage from Havre to New York and to return. The defendant had been committed by one of the police justices of this city, and sued out a certiorari to the Supreme Court to review and quash the proceedings of the committing magistrate.

The Supreme Court decided, on argument, that no court, judge, justice or other magistrate of this State, can lawfully assume to execute the laws of the United States under this treaty, or those with other foreign nations in regard to the apprehension and delivery of deserters from foreign vessels in the ports of the United States; and that the Act of Congress in relation to this subject, passed March 2d, 1829, confers no power upon any but courts and officers of the United States. The prisoner was discharged.

The next case in this volume of Reports which we will notice is that of *Metyzen*, a prisoner who was arrested as a fugitive from justice from France, and was

* Reports of Cases in Law and Equity in the Supreme Court of New York. By OLIVER L. BARBOUR, Counsellor at Law. Vol. I. Albany: Gould, Banks, & Gould. New York: Banks, Gould, & Co., 144 Nassau-street.

accused of embezzling money to a large amount while he held the office of a public notary in one of the departments of that country, and was demanded by the French minister at Washington to be arrested and surrendered under the treaty with France of 1843.

The prisoner had been arrested on application to a police magistrate in this city, and been discharged on appeal to the Circuit Court of the United States, and then an application was made to the District Judge of the United States Court, in the city of New York, and on hearing, had been adjudged a fugitive from justice. A warrant of commitment had been signed by the District Judge, and thereupon the President of the United States had issued his mandate to the marshal of New York, commanding him to surrender the prisoner to the diplomatic agents of the French government.

Before the surrender had been actually made, a writ of habeas corpus issued, directed to the marshal, returnable before Edmonds, a judge of the Supreme Court of this State. The Supreme Court, on a review of all the proceedings, held that the President of the United States has no authority, by virtue of a mere treaty stipulation, and without an express enactment of the national Legislature, to deliver up a resident of this country to a foreign power.

That under the treaty of 1843, the President cannot execute the power of extradition without both legislative and judicial sanction, previously obtained. The prisoner was accordingly discharged.

This case affords a striking illustration of the benign power existing in our State governments to check the action of the national government when its officers exceed their jurisdiction. Our country is a land of laws, and no part of the law affords the citizen greater security than that which is within the legitimate exercise of State authority.

There are many other subjects contained in this volume which we would be glad to notice, but our limits admonish us to close.

ACTION TO RECOVER EXCESS OF DUTIES PAID UNDER PROTEST.

In the United States District Court, (November, 1848.) *Charles Kentgen vs. Cornelius W. Lawrence*, Collector of the port of New York.

This was an action to recover an excess of duties paid under protest on a quantity of patent leather, or varnished calves' skins, imported by the plaintiff, and which were charged by the custom-house authorities with 30 per cent duty under the schedule C, of the tariff of 1846, as embraced in the clause "manufactures and articles of leather, or of which leather shall be a component part, not otherwise provided for;" while the plaintiff claimed that they were subject to 20 per cent duty under schedule E, under the clauses "leather, upper of all kinds," or "skins, tanned and dressed, of all kinds; skins not otherwise provided for." The only other special provision in relation to skins is in schedule I, subject to 5 per cent duty, which includes "raw hides and skins of all kinds, whether dried, salted, or pickled, and not otherwise provided for."

The plaintiff claimed that this patent leather was known in commerce as "upper leather," solely being used for the uppers of shoes and boots, and occasionally for the uppers of harness. The defence contended that the Tariff of 1842 had put a legal definition as a "manufacture of leather" upon this article in the following clause: "leather bottles, patent leather, and all other manufactures of leather, &c.;" and that as the Tariff of 1846 only repeated "all acts and parts of acts repugnant to the provisions of this act," this legal definition of patent leather as a manufacture of leather was still in existence, and must be applied in levying the duty.

The jury, under the charge of the Court, returned a verdict for the plaintiff, the defendant taking exceptions so as to carry up the case to the Supreme Court of the United States.

CONSTRUCTION OF THE TARIFF—GARDEN SEEDS, ETC.

In the United States District Court, (November, 1848,) Judge Nelson, presiding. *H. Boving & M. Witte vs. C. W. Lawrence, Collector.*

This was an action to recover back a duty of 20 per cent which had been charged on mustard, cardamom, fenugreek, and caraway seeds. On the part of the plaintiffs, it was contended that those seeds were free, as coming under that clause of the Act which provides that garden and all other seeds not otherwise enumerated, shall be free. On the part of the defence, it was contended that the clause which provided that garden and all other seeds shall be free, embraced only such seeds as are imported for the purpose of gardening or agriculture, and that those seeds did not therefore come under that clause; and secondly, that the seeds in question came under the clause which imposes a duty on medicinal drugs, roots, or leaves in a crude state; and that those articles were used and known as drugs. In support of this proposition, two witnesses testified that those articles were used as drugs, and known to druggists under the name by which those articles were now designated. On the other hand, several witnesses, who are commercial men, and in the habit of dealing in those articles, testified that they are universally called seeds, in the language of commerce, and are considered to be such.

The Judge in his charge inclined to the opinion that the articles came under the clause of the Act which provides that garden and other seeds not otherwise enumerated are free, and the jury, without leaving their seats, brought in a verdict for plaintiffs for \$365, being the amount claimed.

INSURING AGENTS.

Fourth District Court—Insurance Decision. *Thomas W. Woodland vs. Kellog & Clark.*

In this case the plaintiff set forth in his petition that the defendants had in 1847, in their capacity of forwarding and commission merchants in New Orleans, shipped several lots of western produce for him, and had also (for him) insured such lots of produce in the Sun Mutual Insurance office of New York, whereof L. Matthews is agent in New Orleans. Petitioner further sets forth that premiums paid into said office on such insurances amounted to \$950 95, and that by the charter of the company the insurer is entitled to a certificate of stock in the company to the extent of the premiums paid in. Petitioner averred that defendants, Kellog & Clark, although they had acted as his agents, in effecting the insurances above named, refused to give him an order for a certificate of stock in the insurance company, and withheld the same for their own benefit. The case came up for trial before Judge Strawbridge. The Judge decided that defendants deliver to plaintiff a certificate of stock in the insurance company above mentioned, to the amount of \$150, and pay the costs.

LIABILITY OF COLLECTORS OF CUSTOMS.

In the United States District Court, Felix Brisac and Edward De Fontaine vs. *C. W. Lawrence, Collector.*

This was an action to recover the value of a case of goods, bonded at the custom-house, and not forthcoming when called for. The goods remained in the custom-house about a month, when the duty was paid on them, and a demand made for the delivery, but they could not be found. For the defence, it was contended that the Collector was not personally responsible for the negligence of his subordinates. Verdict for plaintiffs, \$452, being the amount claimed.

COMMERCIAL CHRONICLE AND REVIEW.

THE MONEY MARKET—EXCHANGES—DIVIDENDS OF THE NEW YORK BANKS FOR LAST EIGHT YEARS—BANK DIVIDENDS OF NEW YORK, BOSTON, AND PHILADELPHIA COMPARED—ADVANCE IN BANKING PROFITS—CAUSES LIKELY TO RENDER MONEY CHEAP—CALIFORNIA GOLD DISCOVERIES—PREVIOUS DISCOVERIES OF GOLD IN THE SOUTHERN STATES—FINENESS OF GOLD—ADVANCE OF STOCKS—IMPORTANCE OF A BRANCH MINT IN NEW YORK AND CALIFORNIA—EFFECTS OF GOLD FLOWING OUT OF THE UNITED STATES—FAVORABLE CONDITION OF THE NATIONAL TREASURY—DEBT OF THE UNITED STATES—PRICES OF UNITED STATES STOCKS—CAPITAL INVESTED IN RAILROADS OF THE UNITED STATES—REVENUE OF THE PHILADELPHIA AND COLUMBIA RAILROAD—NEW YORK AND ERIE RAILROAD REVENUE, ETC.—RECEIPTS OF HARLEM AND ERIE RAILROADS COMPARED—NEW YORK AND PENNSYLVANIA CANAL TOLLS—PRODUCE ARRIVED AT TIDE-WATER VIA NEW YORK CANALS—UNITED STATES IMPORTS AND EXPORTS AND CUSTOMS DUTIES, ETC., ETC.

In our last number we pointed out some of the causes in operation to produce more ease in the money market. These have continued to affect favorably the market, and the rate of interest has declined as well on mercantile paper as "for call." Money is now had freely on stocks at *par* at 5 per cent per annum. The imports at the port of New York have continued to decline as compared with the same period of former years, while the exports continue to be considerable and exchanges gradually decline, the rates being now, for sterling bills, some 8 a 8½ per cent. The dividends of the New York banks, for the past year, have considerably exceeded those of former years, and average nearly 8 per cent per annum on a capital of \$23,284,100. The details are as follow:—

DIVIDENDS OF THE NEW YORK BANKS FOR 1845-6-7-8.

BANKS.	1845.		1846.		1847.		1848.	
	Capital. Dollars.	Div. p. ct.	Amount. Dollars.	Div. p. ct.	Amount. Dollars.	Div. p. ct.	Amount. Dollars.	Div. p. ct.
Bank of New York§	1,001,000	4 3	80,000	4 4	80,000	5 5	100,000	5 5
Merchants'†	1,490,000	4 4	119,200	4 4	119,200	4 4	119,200	4 4
Mechanics*	1,440,000	3½ 4	108,000	4 4	115,200	4 4	115,200	4 9
Union*	1,000,000	4 4	80,000	4 4	80,000	5 5	100,000	5 5
Bank of America||	2,001,200	3 3	120,072	3 3½	130,078	3½ 3½	140,084	3½ 3½
City*	720,000	3½ 4	54,000	4 4	57,000	4 4	57,000	4 4
Phoenix||	1,210,000	3 3	72,000	3 3	72,000	3 3	72,000	3 3
North River||	655,000	3½ 3½	45,850	3½ 3½	45,850	3½ 4	45,850	4 4
Tradesmen's||	400,000	5 5	40,000	5 5	40,000	5 10	60,000	5 5
Fulton*	600,000	5 5	60,000	5 5	60,000	5 5	60,000	5 5
Butch. & Drovers'†	500,000	3½ 4	37,500	4 5	45,000	5 5	50,000	5 5
Mech. & Traders*	200,000	3½ 3½	14,000	4 4	16,000	4½ 5	19,000	5 5
National§	750,000	3 3½	48,750	3½ 3½	52,500	3½ 4	55,750	4 4
Merchants' Exch.||	750,000	3½ 3½	52,500	3½ 4	56,250	4 4	60,000	4 4
Leather Manufc.†	600,000	3½ 3½	42,000	3½ 3½	42,000	3½ 3½	42,000	3½ 3½
Seventh Ward.||	500,000	3 3	30,000	3½ 3½	35,000	3½ 3½	35,000	3½ 4
State*	2,000,000	3 3	120,000	3 3	120,000	3 3	120,000	3 3
Bank of Commerce||	3,447,500	3 3	196,465	3 3	206,850	3 3½	223,871	3½ 3½
Mech. Association†	632,000	3½ 3½	44,240	4 4	50,469	3½ 3½	52,120	3½ 3½
Americ'n Exchange*	1,115,400	3 3	60,324	3 3	60,324	3½ 3½	80,878	3½ 4
Manhattan Co.†	2,450,000	....	....	3	61,500	....	....	3 3
Greenwich*	200,000	....	....	....	....	....	....	4 4
Total.....	23,284,100	6.31	1,433,907	7.09	1,534,912	7.00	1,572,173	7.22
							1,836,971	

* Dividend paid May and November. † Dividend paid June and December. ‡ Dividend paid February and August. § Dividend paid April and October. || Dividend paid January and July.

The average dividend for the year 1844, on the same capital, was 6.13 per cent, and the amount, \$1,373,600. The dividends this year are better by 1½ per cent average and \$463,371 in amount. The line of discounts of the New York banks in November, 1847, was high, and was gradually reduced under an advancing rate of interest, circumstances favorable for Bank profits. In Philadelphia, the divi-

ends on \$5,635,880 capital has been \$403,577, or nearly 7 per cent. The three cities of Boston, Philadelphia and New York compared, show rates as follow :—

BANK DIVIDENDS IN 1848.

	Capital.	Dividend.	Av. p. c.
Boston.....	\$18,980,000	\$1,428,350	8.50
New York.....	23,284,100	1,836,971	7.82
Philadelphia.....	5,635,880	403,573	7.02

In each of these cities there has been an advance in banking profits. In Boston the demand for capital for railroads has sustained the rate of interest, to the advantage of the banks. In Philadelphia, there has long been a desire to increase the banking capital, but the dominant party in the State Legislature uniformly opposed bills for that object. The late elections have effected a revolution, and the probability now is that many old banks will be resuscitated and new ones chartered.

For the coming year, from various operating causes, money is, however, likely to be cheap; the more so that the report of the Secretary of the Treasury has presented a satisfactory state of the finances, and removed fears that were entertained in relation to further loans by the government. The means of the Treasury are now quite adequate to its wants, with every prospect that the actual receipts of the customs will overrun the estimates. The exports of the country are large, and will in all probability continue so, involving a return of the proceeds in dutiable goods that must swell the revenues. A new and remarkable element has also made its appearance, to excite speculation and stimulate that desire for enterprise which has long lain dormant. We allude to the gold discoveries in the California regions. This is by no means the first gold excitement to which our markets have been exposed. In the year 1803, a negro found in North Carolina a lump of gold weighing 27 lbs., worth some \$8,000, and since that time many mines have been discovered and worked in Virginia, North Carolina, South Carolina, Georgia, Alabama and Louisiana. In 1830, nearly as great an excitement prevailed in relation to them, as does now in reference to California. Persons from all quarters crowded into those regions, and the product was then estimated at \$5,000,000 per annum. Gradually, however, hopes failed to be realized. Although the mines became richer as they were worked, the business was found in the long run less profitable than others. Hands were withdrawn to cotton fields. Companies dissolved, and the work was continued only by farmers and others, who dig gold only when otherwise unemployed. The census gave the number of smelting concerns at 156, and the product for 1839, \$529,405. From 1824 down to 1848, about \$14,000,000 has been realized from those mines. The new excitement in California is sustained by official reports, and by the arrival of considerable quantities of gold in this city of great purity, say 22 carats fine. A "carat" is a weight of 4 grains, used in weighing diamonds, but used in reference to gold, the mass is supposed to weigh 24 carats, 12 grains each, and "22 carats fine" means there are 22 carats of pure gold and 2 carats of alloy, and this 22 carats is about the fineness of our gold coin; or, as expressed in the mint term, 22 carats is 917 thousandths fine.

Already the prospect of great abundance of gold has promoted a desire to speculate; stocks have generally advanced, and more inquiry for real estate is apparent. Should the very necessary recommendations of the President and Secretary to

establish branch mints in California and New York be carried out, the products of the new mines will be made profitable to all interests. We have for many years contended for a mint in New York, not as a local but a national object; yet last year the bill was defeated through the inconceivably narrow-minded jealousy of certain members, who wanted one at Charleston, where gold never arrives, as an off-set to one in New York, where \$20,000,000 per annum is sometimes received. If the gold is coined where it arrives, and passes into general circulation, every section of the Union is benefitted by the digging, because the rise of all property and wages will be general, and the full currency will overflow in all quarters to the general welfare. To prevent the establishment of a mint at the point demanded by commerce, through stupid sectional spleen, is wantonly to close the gate against a national benefit.

The effect of abundance of gold flowing out of the United States as a domestic product in exchange of the products of European industry, will be immensely to enrich the country. The example of Spain is sometimes held up as an instance of the ruinous influence of gold. They, however, *forbade its export*. They supposed that gold was a good *per se*, whereas its profit is in parting with it, and its benefit in those articles received in exchange. Freely exported, the labor of the world becomes tributary to our own. Should the California mines, in connection with those of Russia, cheapen gold as compared with silver and property, it may become necessary in the United States, where silver and gold are both standards, to revise the gold bills of 1834-37, the object of which was to adjust the relative value of the two metals. By the old law, gold was to silver as 16 to 1. This was supposed higher than the commercial value, leading to the export of gold in exchange for silver. The new value of 15 to 1 is supposed too low, leading to an export of silver. The abundance of gold will enhance this difficulty, and may ultimately lead to the abandonment of one of the standards.

Although this suddenly created gold fever has promoted speculation, money was daily becoming more abundant, and is now so ample in supply, under the influences indicated in our last number, that it is offered at 5 per cent upon stocks, and mercantile paper is freely done, although many heavy payments fall due in December. The highly favorable reports of the state of the national finances, as given by the Secretary of the Treasury, removing fears in relation to further loans, and showing a surplus from ordinary revenues, have tended to relieve the market. The total United States debt, including Treasury notes, is given at \$65,804,234 56, and will not be increased. Stocks have continued to advance in the market, and are now, as compared with last year and some former dates, as follow:—

PRICES OF UNITED STATES STOCKS.

	5's, 1853.	6's, 1856.	6's, 1862.	6's, 1867.	6's, 1868.	Treas. Notes.
Dec. 1847	91 a 92	97½ a 98	98½ a 98½	99 a 99½	.....	99½ a 99½
Aug. 1848	93½ a 93½	103 a 103½	103½ a 103½	104½ a 104½	104½ a 104½	104½ a 104½
Dec. 1848	99½ a 100	103½ a 103½	107½ a 107½	107½ a 107½	107½ a 108½	107½ a 108½

These prices are all quoted without interest, and it will be observed the advance is 8½ a 8½ per cent. The coupon stocks are mostly in advance for foreign investment, as affording the most ready transfer. A movement has been made in Congress to open a transfer office in New York, to facilitate the transactions. As, however, the option with the subscriber by law is to receive the stock with coupons attached, that mode of issue supersedes transfer books.

the following table shows the number of miles of railroads completed, and the total expended annually in the United States:—

RAILROADS OF THE UNITED STATES.

	Miles comp'd.	Capital.	Years.	Miles comp'd.	Capital.
.....	155	\$2,510,000	1840.....	279½	\$4,350,000
.....	17	1,426,966	1841.....	183½	5,100,000
.....	29	500,000	1842.....	277½	6,613,654
.....	151	4,096,000	1843.....	509½	11,090,000
.....	86½	2,838,638	1845.....	410	19,078,274
.....	287	11,750,000	1846.....	484	9,186,000
.....	316½	7,587,114	1847.....	205	2,410,000
.....	237	6,682,578			
.....	571½	14,508,693	Total.....	5,740	\$122,525,937
.....	240½	12,736,000			

Many of these roads were State works, and constructed in the extravagant manner lent to public undertakings; and although a number were unsuccessful for a time, they have finally become profitable. The Michigan roads, which in the early days of the State were but a bill of expense, form now, in the hands of private capitalists, a profitable portion of the great northern chain which connects Boston and New York, Canada West, and Detroit, with Lake Michigan.

The Philadelphia and Columbia Railroad is 82 miles in length, and cost \$4,969 96. From 1833 down to the close of 1844, its revenues had reached \$38,690 41, and the expense \$3,040,750 95, leaving \$357,939 46 for eleven years' interest upon cost, or a tenth of 6 per cent; yet that work, in connection with a continuous line of roads, may, in opposition to the State canals, be considered a lucrative property. Its revenues, from its formation down to the 30th of November, 1848, have been annually as follows:—

REVENUES OF THE PHILADELPHIA AND COLUMBIA RAILROAD.

.....	\$5,002 50	1839.....	\$389,973 97	1845.....	\$311,674 55
.....	40,240 32	1840.....	445,552 32	1846.....	333,608 42
.....	182,609 80	1841.....	411,536 96	1847.....	329,195 00
.....	260,657 83	1842.....	345,081 63	1848.....	330,620 00
.....	353,566 18	1843.....	369,496 08		
.....	390,636 32	1844.....	443,336 42	Total.....	4,943,788 38

Thus, in sixteen years the whole revenues have been rather more than the prime cost of the whole work. The annual expenditure has been very heavy, however, owing to the outlay for State trucks.

The revenues of the Erie Railroad of New York, monthly for the past year, have been as follows, for 63 miles, as compared with the former year. At the close of the present fiscal year the road was opened to Port Jervis, 78 miles, and the road is now completed to Binghamton, 200 miles, having opened on the 27th. The revenues of the next year will be greatly enhanced by this extension. Those of the past two years have been as follows:—

NEW YORK AND ERIE RAILROAD REVENUE, 63 MILES.

	Freight.	Mails and passengers.	Total 1848.	Total 1847.	Increase.
Number 1847	\$11,497 40	\$10,137 31	\$21,624 87	\$15,887 69	\$5,737 18
July 1848	12,134 82	9,071 24	21,206 06	15,318 73	5,887 33
August	13,116 79	7,631 80	20,748 59	17,938 16	2,810 43
September	14,479 55	8,681 11	23,160 69	20,126 05	3,034 64
October	14,843 15	10,955 73	25,798 88	19,127 39	6,671 49
November	13,981 48	11,150 17	25,131 65	19,624 21	5,507 44
December	14,212 81	11,452 06	25,664 87	21,346 87	4,318 00

NEW YORK AND ERIE RAILROAD REVENUE, 63 MILES—CONTINUED.

		Freight.	Mails and passengers.	Total 1848.	Total 1847.	Increase.
July	1848	14,020 55	13,152 17	27,272 72	23,791 84	3,380 88
August	"	14,354 32	13,300 97	27,655 29	24,055 60	3,628 69
September	"	14,063 74	12,079 30	26,143 04	23,924 84	2,218 20
October	"	16,365 42	12,624 56	28,989 98	24,343 97	4,746 01
November	"	18,167 13	10,852 66	29,019 79	23,038 01	5,981 81
Total.....		\$171,237 16	\$131,089 08	\$302,326 43	\$248,520 36	\$53,941 90

It may be useful to compare the Harlem and Erie Railroads monthly for the two past years, as follows :—

	Harlem, 53 miles. Cost \$2,874,892.		Erie, 63 miles. Cost \$2,759,835.	
	1847.	1848.	1847.	1848.
December.....	\$13,400	\$20,789	\$15,887 69	\$21,624 87
January.....	13,688	21,331	15,318 73	21,206 06
February.....	12,597	19,012	17,938 16	20,748 59
March.....	14,917	20,172	20,126 05	23,160 69
April.....	16,563	22,436	19,127 39	25,798 88
May.....	19,105	28,479	19,624 21	25,131 65
June.....	23,016	29,598	21,348 87	25,664 87
July.....	28,637	32,414	23,791 84	27,172 72
August.....	30,050	33,284	24,056 60	27,655 29
September.....	25,986	31,441	23,924 84	26,143 04
October.....	28,382	29,601	24,343 97	28,989 98
November.....	22,678	24,848	23,039 01	29,019 79
Total.....	\$248,919	\$313,845	\$248,520 36	\$302,326 24

These roads are nearly of a length, both communicating with the city of New York. It will be observed, however, that more than half of the Erie receipts are *freight*, the passenger travel from the interior of Orange county being small. On the other hand, the Harlem receipts are not more than 10 per cent from freight. Its chief revenues are from the city travel, in opposition to omnibusses below 27th street. Thus in 1835 the Harlem Railroad was $7\frac{1}{2}$ miles long, and the population of the city being 270,089, the receipts from passengers was \$54,035; in 1840, the same length of road gave \$102,000 revenue, the population of the city being 312,710. In 1845 the population was 371,102, and the Harlem revenues were \$175,253, for 27 miles in operation. They are this year \$313,845 for 53 miles, and a population not short of 450,000 souls. Thus in 1835, 5 persons contributed \$1 to 8 miles of road; in 1840, 3 persons contributed \$1 to 8 miles of road. Had the trade remained the same, the revenue of the road for 8 miles should this year have been \$150,000 for 8 miles of road, leaving \$150,000 for the income of 45 miles in Westchester. This result shows that the extension of the Harlem has not proportionably improved its business, while that of the Erie indicates an immense development of agricultural resources. The tolls of the two great lines of internal communication, the Erie Canal and the Pennsylvania canals, have for the past years been reported as follow :—

NEW YORK AND PENNSYLVANIA CANAL TOLLS.

	1843.	1844.	1845.	1846.	1847.	1848.
Erie canal.....	\$2,082,145	\$2,446,038	\$2,646,117	\$2,756,120	\$3,635,380	\$3,279,443
Penn. canals....	1,017,841	1,164,325	1,196,979	1,295,494	1,587,995	1,550,555
Total.....	\$3,099,986	\$3,610,363	\$3,843,096	\$4,051,614	\$5,223,375	\$4,829,998

Nothing can more forcibly represent the great prosperity of the country as a whole, than these large revenues, derived mostly from the transportation of the produce of the interior to the seaboard for sale abroad. The returns of both these works indicate a decline in revenues corresponding with the falling off in the export trade of the country through the lessened demands of Europe for food, consequent upon a good crop in 1847. The following table shows the quantity of some of the principal articles of produce left at tide-water from the commencement of navigation to the close, during the last seven years :—

PRODUCE ARRIVED AT TIDE-WATER VIA THE NEW YORK CANALS.

	1842.	1843.	1844.	1845.	1846.	1847.	1848.
Flour.....bbls.	1,577,555	2,073,708	2,322,204	2,517,250	3,063,441	3,952,973	3,121,655
Wheat.....bush.	928,347	827,346	1,262,249	1,620,033	2,950,636	4,143,830	3,081,458
Corn.....bush.	366,111	186,016	17,861	35,803	1,610,149	6,053,845	2,867,937
Barley.....bush.	522,993	543,996	818,872	1,137,917	1,427,953	1,523,020	1,551,386
Beef.....bbls.	21,437	47,465	50,000	67,699	45,600	71,266	63,988
Pork.....bbls.	79,235	63,777	63,646	45,154	80,093	76,179	86,301
Asbes.....bbls.	44,824	77,739	80,646	69,668	46,812	37,538	64,616
Butter.....lbs.	19,182,930	24,205,700	22,596,300	21,825,455	21,477,657	22,724,000	23,527,302
Lard.....lbs.	19,004,613	24,336,260	26,674,500	3,064,800	6,721,000	4,348,000	9,786,418
Cheese.....lbs.	19,004,613	24,336,260	26,674,500	27,542,861	35,560,118	40,844,000	42,947,320
Wool.....bales	3,355,148	6,216,400	7,672,300	9,504,039	8,866,376	12,044,000	8,729,407
Bacon.....bbls.				1,631,700	4,000,500	4,902,000	8,221,850

The quantities of every article are far in excess of any year prior to 1847, and the articles of butter, lard, cheese and bacon, show the most extraordinary results. The weight of these four articles for the last year has been 84,482,949 lbs., having steadily increased from 38,187,543 lbs., which was the total in 1842. The largest proportion of this immense increase has been exported, swelling the sum of the export value of breadstuffs and provisions, as given in the above table, some \$26,000,000. The corn trade has also become important, and will now, probably, even in years of good harvests, continue to increase in magnitude the more it becomes known as an article of food in Europe. The present fiscal year will present far greater results in the way of exports of breadstuffs. From the port of New York the following quantities have gone monthly abroad :—

	July.	August.	Sept.	Oct.	Nov.	Dec. 1 to 12.	Total.	Total '47.
Flour.....bbls.	27,518	44,998	106,739	155,784	233,681	33,561	502,391	739,287
Wheat.....bush.	18,824	19,173	156,103	159,953	180,378	22,654	547,085	1,191,604
Corn.....bush.	289,080	465,697	1,060,953	510,500	634,326	140,136	3,065,692	1,408,332
Beef.....bbls.	1,180	2,001	1,538	1,229	9,380	4,947	20,275	14,908
Pork.....bbls.	4,604	7,356	6,109	3,186	5,993	1,492	28,740	27,179
Lard.....kegs	23,719	20,332	19,703	22,356	27,185	5,260	117,555	33,611

Last year, the largest proportion was shipped in July, under the accounts here of the high prices current in England in June. Those prices fell rapidly, and with them the exports fell off to a low figure. This year the reverse has been the case, and the disposition to ship has improved as the season advances.

The returns of the imports and exports of the United States, as indicated in the official returns of the Treasury department, indicate similar results, as follows :—

UNITED STATES IMPORTS AND EXPORTS AND CUSTOM DUTIES.

Years.	Breadstuffs and provisions.	Other domestic articles.	Foreign goods.	Total.	Imports.	Duties.
1843	\$11,204,123	\$66,589,660	\$6,552,697	\$84,346,480	\$64,753,799	\$7,046,844
1844	17,970,135	81,745,044	11,484,867	111,200,046	108,435,035	26,183,571
1845	16,743,421	82,556,355	15,346,830	114,646,606	117,254,564	27,528,112
1846	27,701,121	75,640,772	11,346,623	113,488,516	121,691,797	26,712,667
1847	68,701,921	81,935,543	8,011,158	158,684,622	146,545,638	23,747,864
1848	37,472,751	95,431,370	21,108,010	154,032,131	154,977,826	31,757,070

The export of breadstuffs in the last year, which has been one of good English

harvests, has been much less than in 1847, the year of "famine," but it greatly exceeds that of any prior year, and the whole shows a greatly increased and beneficial trade, particularly in corn and provisions. The export value of other domestic produce was not probably realized abroad, more particularly in relation to that which fell in price rapidly as the year advanced. Of the large amount under the head of foreign produce exported, a considerable portion was of the precious metals exported in the shape of foreign coin, through a pressure of extraordinary demand, growing out of political revolutions in Europe. This amount probably rivalled that imported in the previous year. The amount so exported was, however, nearly all supplied by immigration, and did not appear in the custom-house books.

The late European accounts are of a more encouraging aspect. Money continued abundant in the London market at $1\frac{1}{2}$ a 2 per cent, and breadstuffs were heavy under the large arrivals from the United States and Europe. The manufacturing districts were more active, and the prospects more encouraging—so much so, that an advance of $\frac{1}{4}$ d. per lb. had been effected in cotton, in face of the large crop and the disturbed condition of Europe. The greatest excitement prevails on the Continent in relation to the election of President in France, which was to have come off on the 10th December. The Prince Louis Bonaparte would, without doubt, be elected; and his manifesto had given much satisfaction from its pacific tone and sound economic views, clearly recognizing the fact that the future welfare of France depended upon the free exercise of individual industry and removal of taxes, through the economy effected by the diminution of the army and government pensioners. Should order be restored, and industry resume its course, the prospect of the coming year is of great prosperity for the United States.

COMMERCIAL REGULATIONS.

IMPORTATION OF FOREIGN YARN INTO ENGLAND.

SEVERAL importations of yarn, composed of a mixture of raw silk and worsted yarn, have recently taken place from France, and application has been made for the delivery of the article, free of duty, the same being in a raw state, and to be manufactured in this country into shawls, on the grounds that it would assist the home manufacturers of shawls, and enable them to compete with the foreign manufacturers, which is to a great extent impracticable if the duty of goods manufactured, as required by the revenue officers, were levied on the raw material. The parties having been referred to the higher authorities in the matter, application was made to the Lords of the Treasury for the admission of a particular parcel of this mixture of silk and worsted yarn free of duty; setting forth the impetus which would be caused if the manufacturers of shawls in this country could have the benefit of the raw material from abroad free of duty, and their lordships granted permission for the delivery of that particular parcel free of duty, as requested. As the importation of this mixed yarn has continued to take place, and the Treasury orders having reference only to a parcel in particular, leaving subsequent importations of a similar character without the same amount of privilege, a further memorial has been made to their lordships for their orders to be given for the general and free admission of the yarn in future, without hindrance. It appears that, by the act 8th and 9th Vict., cap. 90, the following articles are admissible free of duty on importation into this country, namely, raw silk, thrown silk, not dyed and dyed, being organzine or crepe, and yarn, camel or mohair, raw linen and raw worsted yarn, not dyed nor colored, and not being fit or proper for embroidering or other fancy purposes; and that this mixture is composed of silk and worsted thrown together, and in strictness liable, as goods manufactured, to the *ad valorem* duty of

10 per cent, but that the worsted yarn and raw silk, if imported separately, would each be legally admissible free of duty, and as the yarn is imported for the purpose of being manufactured into shawls in this country, and stated to be a matter of vast importance to the home manufacturers of those articles, the Lords of the Treasury have caused a communication to be made to the customs authorities, through Sir Charles Trevelyan, one of their lordship's secretaries, stating that, having had under consideration the memorial of the parties alluded to, he had been commanded by their lordships to authorize the commissioners of customs to admit the article in question, in this and other similar importations, free of duty. In communicating this order of the Lords of the Treasury to the principal officers of the customs revenue throughout the kingdom, for their information and government with respect to the future importations of yarn, they have received instructions to observe that the article referred to is composed of worsted and silk, thrown together for the purpose stated.

RATE OF DOCK DUES AT BRISTOL.

REDUCTION OF DOCK DUES AT BRISTOL, ENGLAND, COMMENCING NOVEMBER 1ST, 1848.

ON SHIPPING.

	Old rate per ton meas't.		New rate per ton meas't.	
	s.	d.	s.	d.
From Africa, East and West Indies, the United States of America, and Mediterranean.....	3	0	1	0
From British Colonies in North America, Prussia, Russia, Sweden, and Spain.....	2	0	1	0
From Norway, Denmark, Germany, Holland, Flanders, France outside Gibraltar, Guernsey, and Jersey.....	1	0	0	6
From Ireland, Scotland, and Isle of Man.....	0	8	0	4
From English coasters.....	0	6	0	4

No dock dues on shipping *outwards*, and no charge for lying in port any length of time.

ON GOODS.

Dock dues on 530 articles abolished—only about 100 articles chargeable. Among those free of dock dues are cotton, wool, turpentine, flour, grain, bread, provisions of all kinds, &c., &c.

No dock dues, town dues, or any other port charge on goods exported.

No dues of any kind on imports from or exports to Ireland.

Foreign import-wharfrage reduced to a maximum rate of 6d. per ton—many articles much less.

Bristol is the nearest English port (having dock accommodations) to the Atlantic, which makes the *light dues* on shipping much less than at London or Liverpool. The pilotage also is low, and the British Channel is unrivalled for safety of navigation.

During the commercial depression of 1847, while houses of long standing and high repute were annihilated in other ports, not a single mercantile failure took place in Bristol, all stood their ground and paid their way without difficulty. The trade of the place is already increased, and with its freedom from vexatious charges, which counteracted its natural advantages, the increase will be rapid and continued.

Back freights of iron and coal are always to be had to the United States either in the port, or at Cardiff, or Newport, which are within a few hours sail.

PRIVATEERING IN THE UNITED STATES.

Dr. Wheaton takes credit to the United States for having, by treaty with Prussia, in 1785, agreed in no future war with that power to employ privateers. It appears, however, that the privateering system has been carried further by America than any other power, for, during the war with Great Britain, the legislature of New York passed an act which constituted every association of five or more persons desirous of embarking in the trade of privateering, should it comply with certain formalities, a body politic and corporate, and conferred on it the ordinary corporate powers.—*Polson's Principles of the Law of Nations*.

BRITISH REGULATIONS FOR STEAMERS.

It is required, by a recent statute, that on or before the last day of the present month the owners of all steam-vessels, whether they proceed by sea or not, transmit to the British Board of Trade two declarations of the sufficiency and good condition of the hull of

every steamer, and of the good condition of the machinery. By the 11th and 12th Victoria, cap. 81, it is provided that if the owners shall neglect to send the declarations, they shall forfeit and pay the sum of 10s. for every day's delay, unless such delay shall be accounted for to the satisfaction of the British Board of Trade.

JOURNAL OF BANKING, CURRENCY AND FINANCE.

CONDITION OF THE BANKS OF MASSACHUSETTS FROM 1837 TO 1848.

Year.	No. Banks.	Capital.	LIABILITIES.			
			Circulation.	Deposits.	Profits.	Total.
1837	129	\$38,280,000	\$7,233,905	\$14,059,449	\$1,514,535	\$61,087,889
1838	120	34,630,000	5,519,210	9,621,217	1,897,333	51,667,760
1839	118	34,485,600	4,977,528	6,728,718	1,755,772	47,947,618
1840	115	33,750,000	6,221,274	8,636,923	2,067,095	50,675,292
1841	114	33,360,000	7,147,155	8,604,721	2,792,114	51,903,990
1842	111	32,631,060	6,048,223	7,456,504	2,331,475	48,467,161
1843	103	31,089,800	7,143,342	10,928,485	2,312,367	51,473,994
1844	103	30,020,000	9,526,070	13,031,106	1,989,132	54,566,308
1845	104	30,970,000	11,472,785	12,751,253	1,910,466	57,104,603
1846	105	31,160,000	11,454,086	10,360,648	2,504,136	55,478,870
1847	109	32,113,150	15,624,860	11,030,270	3,499,583	62,267,863
1848	112	32,985,000	11,473,827	8,564,985	3,737,435	56,761,427

CONDITION OF THE BANKS OF MASSACHUSETTS—CONTINUED.

Years.	RESOURCES.				Ratio of cir. to specie.
	Notes and drafts due.	Specie.	Real estate.	Total.	
1837.....	\$58,414,182	\$1,517,984	\$1,155,723	\$61,087,889	\$4 77
1838.....	48,206,809	2,394,624	1,066,327	51,677,760	2 31
1839.....	44,967,750	1,838,273	1,141,595	47,947,618	2 71
1840.....	46,513,685	2,991,685	1,169,803	50,675,292	2 08
1841.....	47,553,961	3,111,838	1,238,191	51,903,990	2 30
1842.....	44,610,391	2,682,310	1,174,460	48,467,161	2 25
1843.....	42,993,292	7,298,816	1,181,886	51,473,994	0 98
1844.....	48,770,975	4,587,141	1,208,192	54,566,308	2 08
1845.....	52,648,730	3,357,904	1,097,969	57,104,603	3 42
1846.....	51,326,114	3,054,756	1,098,000	55,478,870	3 75
1847.....	57,260,939	3,943,974	1,062,950	57,267,863	3 96
1848.....	53,110,100	2,578,030	1,073,117	56,761,247	4 45

PUBLIC DEBT OF ILLINOIS.

EXTRACT FROM THE ADDRESS TO THE PEOPLE OF ILLINOIS BY THE CONVENTION OF 1848.

The principal part of the debt is \$6,245,380; a two mill tax in 1848 will produce about \$200,000. This tax will increase annually at the rate of about 7 per centum throughout the 25 years, reasoning from experience connected with western advancement. Taking these two propositions as the basis of our calculation, in 19 years this tax will yield \$6,194,000, which leaves unpaid of the principal only \$51,380. There is, however, already accrued \$2,248,372 of interest, which will be increased to about \$3,000,000 before this provision can be carried into operation. There will accrue during the 19 years \$3,559,916, making the aggregate of interest due at that time \$6,559,916, which, however, is subject to constant reduction from three-fifths of the mill and a half fund now raised, which in the 19 years amounts to \$2,784,300, leaving interest then really due amounting to \$3,775,316. To this add the unpaid portion of the principal, \$51,380, and we have \$3,826,996, which, without any great increase of interest, is yet to be discharged. To do this we now have the aggregate fund produced from the three-fifths of the mill and a half tax and from the two mill tax, which in the six following years will produce \$4,358,700, which will liquidate the whole amount, being an excess of nearly \$500,000. All this, too, without materially increasing our burdens, when viewed in connection with the proposed reduction of State expenses.

DEBT OF THE STATE OF NEW YORK.

Astor loan, at 5 per cent.....	\$561,500 00
Bank fund ".....	348,107 00
Ithaca and Owego Railroad, 4½ per cent.....	287,700 00
" " " 5½ ".....	28,000 00
Canajoharie and Catskill Railroad, 5 per cent.....	200,000 00
New York and Erie Railroad, 4½ per cent.....	300,000 00
" " " 5½ ".....	1,600,000 00
" " " 6 ".....	1,100,000 00
Hudson and Berkshire Railroad, 5½ per cent.....	150,000 00
Indian annuities, 6 per cent.....	122,694 87
Temporary loans.....	1,441,838 95

General fund debt..... \$6,139,840 82

Erie & Champ'n C'ls, 7 p. c..	\$136,378 52	Black River Canal, 5 p. c...	\$1,127,706 23
Erie enlargement, 5 p. c ..	6,815,519 29	" " 6 " ..	436,293 77
" " 6 " ..	1,311,867 65	Genesee Valley C'l, 5 p. c.	2,797,379 82
" " 7 " ..	1,994,613 06	" " 6 " ..	287,243 56
Cayuga & Seneca C'l, 5 p. c.	87,000 00	" " 7 " ..	800,376 62
Chemung Canal, 5 p. cent.	437,292 23	Oneida Lake Canal, 5 p. c.	50,000 00
" " 6 " ..	72,160 11	Impr't of Oneida R'r, 5 p. c.	58,000 00
" " 7 " ..	139,148 24	" " 6 " ..	1,843 56
Crooked Lake Canal, 5 p. c.	120,000 00	" " 7 " ..	9,432 57
Chenango Canal, 5 p. cent.	27,030 00		
" " 6 " ..	28,362 00	Canal debt.....	\$16,743,749 57
" " 7 " ..	6,102 34		

Delaware and Hudson Canal Company, 4½ per cent.....	\$300,000 00
" " " 5 " ..	493,000 00
Auburn and Syracuse Railroad, 5 per cent.....	200,000 00
" Rochester Railroad, 5½ " ..	200,000 00
Long Island Railroad, 6 per cent.....	100,000 00
Schenectady and Troy Railroad, 6 per cent.....	100,000 00
Tonawanda Railroad, 5½ per cent.....	100,000 00
Tioga Coal, Iron Mining and Manufacturing Company, 5½ per cent.	70,000 00

Contingent debt..... \$1,563,000 00

RECAPITULATION.

General fund debt.....	\$4,575,307 00	Interest.....	\$244,966 85
Indian annuities and Temporary loans.	1,564,533 82	"	93,961 24
Canal debt.....	16,743,749 57	"	923,633 40
Contingent debt.....	1,563,000 00	"	81,500 00
Debt on 30th September, 1847.....	\$24,446,590 39	"	\$1,344,061 49
Redeemed on 1st January, 1848.....	841,107 00	"	43,055 35
Present debt, April, 1848.....	\$23,605,483 39	"	\$1,302,006 14

The interest on the contingent debt is provided for by the respective companies to whom the credit of the State was loaned. On the other debts the interest is raised by the Treasury.

TIME OF REDEMPTION.

1848.....	\$1,379,480 00	1861.....	\$3,782,974 23
1849.....	2,149,400 00	1862.....	1,800,000 00
1850.....	736,000 00	1864.....	587,700 00
1851.....	870,000 00	1865.....	348,000 00
1854.....	520,000 00	1867.....	100,000 00
1856.....	4,000,000 00	Uncertain.....	2,130,223 82
1858.....	3,358,605 34		
1859.....	350,000 00	Total.....	\$23,605,483 39
1860.....	1,493,100 00		

The receipts from the State canals for the year ending 30th Sept. were.	\$3,473,486 60
The repairs and expenses.....	641,652 08
Leaving a surplus of.....	<u>\$2,831,834 52</u>
Applied to expenses of government.....	\$200,000 00
To pay interest and principal of canal debt.....	1,300,000 00
" " general fund debt.....	350,000 00
Remainder for the completion of canals.....	981,834 52
Total.....	<u>\$2,831,834 52</u>

A large sinking fund, and the daily increasing income from the State canals and other improvements, added to the many other resources of this flourishing State, provide for the most punctual payment of the interest on this debt, and for its gradual extinguishment.

NEW YORK CITY DEBT.

Public building stock, redeemable 6th May, 1856, 5 per cent.....	\$515,000 00
Fire loan stock, " 16th Jan., 1851, 5 "	500,000 00
Fire indemnity stock " 10th May, 1861, 5 "	375,088 00
City stock of 1820 & 1829, " in 1850, 5 "	250,000 00
Croton water stock, " in 1890, 5 "	385,000 00
Temporary water loan, " before 1850, 5 "	701,423 00
Water loan stock, " 1st Feb., 1852, 7 "	90,857 00
" " " 1st Aug., 1852, 7 "	799,350 00
" " " 1st Feb., 1857, 7 "	989,488 00
" " " 1st Jan., 1858, 5 "	3,000,000 00
" " " 1st Jan., 1860, 5 "	2,500,000 00
" " " 1st Nov., 1870, 5 "	3,000,000 00
" " " 1st Nov., 1880, 5 "	1,445,577 00
Total.....	<u>\$14,551,783 00</u>
Less held by the commissioners of the sinking fund.....	2,541,432 24
Debt on the 1st January, 1848.....	\$12,010,350 76
The debt was, on the 1st January, 1847.....	12,257,906 89
Decrease.....	<u>\$247,556 13</u>

ASSOCIATED CAPITAL AND ACTION.

What is said by the New York Sunday Dispatch in the paragraph below, is unquestionably correct, as to the results of combination for certain purposes. The Dispatch says:—

A single man can erect a hovel which will barely shelter him. A number of men, combining their efforts, can build a comfortable dwelling; and we have only to extend the principle of association to produce vast palaces, suitable for every purpose of social life. Odd Fellows' Hall affords a magnificent place of meeting for thousands of Odd Fellows. We have but to carry the principle a little further, and the families, the wives and children of Odd Fellows could have for drawing-rooms, parlors and chambers, edifices as spacious and convenient, furnished with luxury and adorned with art. The splendid refectory might furnish meals for hundreds of our families, and our whole social life might thus be brought into conditions of beauty and harmony. We are surrounded by the finest examples of the benefits of associated capital, skill and labor. By these means, instead of each man making his own path through the forest, we have turnpike roads, paved streets and railroads. Instead of each man paddling about our rivers in his own canoe, we have steamers that carry with unequalled speed, comfort, and luxury, a thousand passengers. By means of association, we have vast hotels, splendid public buildings, and magnificent churches. There is, apparently, but one step more for association to take—it is the organization of industry upon the same principles, and the introduction of splendor and luxury into our every-day life, as well as into our amusements and occasional pursuits. There is more labor and wealth wasted every year, in the present order of

age, than would suffice to make us all tolerably rich. There is an infinite waste in trying to get along without association. It is just such waste as there would be if we could burn all the steamboats, and a hundred thousand people should paddle up and down Hudson, each in his own canoe. To be sure, such a mode of navigation would be independent, and secure men from coming in contact with disagreeable persons, and that; but as we have tried the steamboat and got along pretty well, we may be excused for preferring it.

BRITISH BANKING RETURNS.

The *London Bankers' Magazine* for December, 1848, gives the following summary of weekly returns of the note circulation of the banks of issue in England, Ireland, and Wales:—

SUMMARY OF THE ENGLISH RETURNS.

Banks.	Fixed issues.	October 14.	October 21.	October 28.	November 4.
Private.....	£4,822,488	£3,938,548	£3,947,191	£3,918,126	£3,870,614
Joint-stock.	3,409,987	3,854,741	2,880,828	2,859,006	2,830,477
Total.....	£8,232,475	£6,793,289	£6,828,019	£6,777,132	£6,691,091

Average weekly circulation of these banks for the month ending November 4:—

Private banks.....	£3,918,619
Joint-stock banks.....	2,853,763

Average weekly circulation of private and joint-stock banks ending as above. £6,772,382

In a comparison of the above with the returns for the month ending 7th October last, it shows—

Increase in the notes of private banks of.....	£237,025
“ “ joint-stock banks of.....	187,014

Total increase on the month..... £424,039

And, as compared with the month ending the 6th November, 1847, it shows—

Decrease in the notes of private banks of.....	£380,739
“ “ joint-stock banks of.....	230,348

Total decrease, as compared with the same period of last year..... £611,077

In the *Banking Almanac* for 1849 the fixed issues of the several banks at the present time is stated to be as follows:—

Fixed issue of private banks at October, 1848.....	£4,822,488
“ joint-stock banks “.....	3,409,987

Amount of the fixed issues..... £8,232,475

The following appears to be the comparative state of the circulation, with reference to fixed issues:—

Private banks are below their fixed issue.....	£903,869
Joint-stock banks are below their fixed issue.....	556,224

Total below the fixed issue..... £1,469,093

SUMMARY OF IRISH AND SCOTCH RETURNS TO NOVEMBER 4.

The returns of circulation of the Irish and Scotch banks for the four weeks ending 4th November last, when added together, give the following as the average weekly circulation of these banks during the past month:—

Average circulation of the Irish banks.....	£5,026,717
“ “ Scotch banks.....	3,306,273

Total average circulation of these banks for the past month..... £8,332,990

On comparing these amounts with the returns for the month ending 7th October *last*, they show—

Increase in the circulation of Irish banks.....	£590,296
“ “ “ Scotch banks.....	169,757
Total increase last month.....	£690,053

And, as compared with the month ending 6th November, 1847, they show—

Decrease in the circulation of Irish banks.....	£492,597
“ “ “ Scotch banks.....	300,445
Total decrease on the year.....	£793,042

The fixed issues of the Irish and Scotch banks at the present time are given in the *Banking Almanac* for 1849, as follows:—

8 Banks in Ireland allowed to issue.....	£6,354,494
18 “ “ Scotland “ “	3,087,909
26 Banks in all allowed to issue.....	£9,441,703

The following appears, therefore, to be the comparative state of the circulation:—

Irish banks are below their fixed issue.....	£1,327,777
Scotch banks are above their fixed issue.....	219,064
Total below the fixed issue.....	£1,108,713

The amounts of gold and silver held at the head offices of the several banks during the past month has been as follows:—

Gold and silver held by the Irish banks.....	£1,494,899
“ “ “ Scotch banks.....	997,740
Total of gold and silver coin.....	£2,492,639

Being an increase of £74,559 on the part of the Scotch banks, and an increase of £2,747 on the part of the Irish banks on the several amounts held by them during the preceding month.

RHODE ISLAND BILLS OF CREDIT.

The earliest emission of bills of credit, to take the place of gold and silver in Rhode Island, was made in 1710. The colony had been at great expense in furnishing supplies for the war with France, in which the mother country had been involved ever since the accession of William and Mary to the throne. Finding the resources of the treasury inadequate to the exigency, the General Assembly, following the example already set by Massachusetts twenty years before, adopted the fatal though perhaps inevitable expedient of issuing bills of credit, and thus delaying the actual payment of debts which had been incurred. The first emission did not exceed the sum of five thousand pounds; but this mode of postponing to the future the necessities of the present having been once invented, was found to be too convenient to be readily abandoned. Other emissions followed in rapid succession, until, in 1749, after the lapse of nearly forty years, the bills which had been issued amounted to not less than three hundred and thirty-five thousand three hundred pounds, of which one hundred and thirty-five thousand pounds were still standing against the treasury, in one form or another; and these constituted the depreciated and almost valueless currency of the colony. Every occasion of public expenditure furnished an excuse for the issue of a new *bank*; and though merchants were everywhere suffering from the policy, and frequently petitioned against it, and most intelligent persons were satisfied of its ruinous tendency, yet so captivating to the people is always the idea of plentiful money, and so clamorous were now the multitude of those who were largely in debt, that numbers of the assembly constantly yielded to the popular will, and in some instances, it is said, actually legislated to meet their own private necessities. The currency which was thus created tended in no equivocal manner to impair the commercial contracts, and to prostrate the commercial honor of the whole community; while it perpetually offered to the reckless and the profligate an opportunity, too tempting to be resisted, to counterfeit the bills of the colony—a crime of frequent occurrence, though punished in Rhode Island

with cropping the ears and branding the forehead of the offender, together with the confiscation of his entire estate. Such is a brief outline of the subject upon which the two political parties in Rhode Island were accustomed to divide during the period of which we are now writing.—*Sparks' American Biography.*

ASSAY OF CALIFORNIA GOLD AT THE UNITED STATES MINT.

The readers of the "*Merchants' Magazine*" are referred to an article on the "California Gold Region" in the body of the present number, which furnishes a condensed view of all the facts brought to light by the recent discovery of the precious metal in that region. It will be seen below, by the official letter of R. M. PATTERSON, Esq., the Director of the United States Mint at Philadelphia, to the Secretary of the Treasury, that \$36,492 worth of the California gold has been assayed, with the most satisfactory results. The purity is extraordinary, the gold dust yielding 98½ pure gold; the melted gold yielding within 6-1000, or ⅙ in the \$1,000, of the mint standard of 900. This far exceeds the expectations of the most sanguine, and places the extraordinary purity of the gold beyond controversy.

MINT OF THE UNITED STATES, }
Philadelphia, December 11, 1848. }

SIR:—On the 8th instant we received, as I have already had the honor to inform you, the first deposit of gold from California. It was deposited by Mr. David Carter, who brought it from San Francisco by the isthmus route. It weighed 1,804.59 ounces troy; of which 1,423.80 was from the lower surface mines, and 380.79 from those at Feather River. On the 9th instant another deposit was sent by the Secretary of War, which weighed 228 ounces.

The gold was of two sorts in external character, though apparently not different as to quality. The first, from the "dry-diggings," was in grains which averaged from one to two pennyweights; the other variety, from the swamps or margins of the streams, being in small flat spangles, of which, on an average, it would take six or seven to weigh one grain. Of these by far the larger part of the deposits was composed.

The gold was melted in six parcels, and the loss by melting, due to the earthy and oxidizable matter which disappears in this operation, averaged about 2½ per cent of the original weight. The loss thus reported is moderate, and shows that the gold had been carefully washed.

Assays of the melted gold were made with great care, and the results showed a variation in fineness from 892 to 897 thousandths; the average of the whole being 894. This is slightly below the standard fineness, which is 900.

The average value per ounce of the bullion, before melting, is \$18 05½; that of the same in bars, after melting, is \$18 50.

The whole value of the gold in the two deposits was \$36,492, besides a few ounces reserved in the native state for the Secretary of War at his request.

Very respectfully, your faithful servant, R. M. PATTERSON, *Director.*

HON. ROBERT J. WALKER, *Sec'y of the Treasury.*

NOTICE OF REDEMPTION OF TREASURY NOTES.

TREASURY DEPARTMENT, December 2d, 1848.

Notice is hereby given, under the section of the act of January 28th, 1847, of the readiness of this Department to redeem the Treasury Notes issued by authority of that act, whenever they shall respectively reach their maturity. Such Treasury Notes shall be entitled to carry interest until maturity, after which interest thereon will cease.

Holders of such Treasury Notes may, under the provisions of the 13th section of the act, at any time fund them in six per cent stock of the United States, transferable on the books of the Treasury, and reimbursable at any time after the last day of December, 1867, by presenting such notes at the Treasury to either of the assistant Treasurers of the United States, or the Collector of Baltimore.

Holders of such Treasury Notes as wish them redeemed in cash at their maturity, will transmit them to the First Auditor of the Treasury for settlement, indicating the assistant Treasurer, upon whom a draft for the amount due thereon will be most convenient.

R. J. WALKER, *Secretary of the Treasury.*

THE MODEL BANKER AND BANKER'S CLERK.

The Brothers Harper have re-produced from the English press an amusing, if not very instructive work, entitled the "*Model Men, Modelled by Horace Mayhew*," which embraces the model men in most of the walks and relations of every-day life. The portraiture, we take it, are drawn from life, as exhibited in the dwellings, streets, and marts of London. As a specimen of the author's capacity at modelling, we take his Model Banker and Banker's Clerk, the most appropriate (if not the most accurate models) for the pages of the *Merchants' Magazine*:-

The Model Banker is educated at Eton, and makes love to lords. They borrow his money, and laugh at him, as "a toady." He enters the banking-house at twenty-one, and looks upon the clerks as servants—as breathing copying machines. He belongs to all sorts of clubs. He is a great authority upon wines, horses, and women. He keeps his yacht, and never stops in town after the Opera. He walks through the city as if it belonged to him. He is great in jewelry, and very particular about his riding-whips. He wears in winter white cords and buckskin gloves, and subscribes to the nearest "hounds." His wristbands show an inch and a half. He marries a baronet's daughter, and talks nothing but the Blue Book ever afterwards. He has a house in Belgravia, and a seat in the North. He has noisy luncheons in the "parlor." His dinners elicit a little paragraph of praise from the *Morning Post*. His name, too, is generally amongst the "fashionables whom we observed last night at her Majesty's Theatre." He has always a particular engagement at the West-end at two, at which hour his bay cob invariably calls for him. His printed charities are very extensive—one sum always for himself, another for the Co. He is very nervous during panics, and when there is a run upon the bank, it is always owing to "the pressure of the times." He pays his creditors half a crown in the pound, and lives on £3,000 a year, "settled on his wife." We never knew a Model Banker fail yet, that his fall was not agreeably softened by a snug little property "settled upon his wife." From this we infer that the Model Banker is a most rigid cultivator of the matrimonial virtues, and if he forgets occasionally what he owes to himself and to others, he remembers to a nicety what is due to his wife. It is only the system of Double Entry applied to Banking.

The Banker's Clerk is born to a high stool. He is taught vulgar fractions, patience, and morals, in a suburban school. At fourteen he shoulders the office-quill. He copies letters from morning till night, but has no salary. He is to be "remembered at Christmas." He is out in all weathers. At twenty he is impervious to rain, snow, and sunshine. At last he gets £40 per annum. Out of that revenue he pays £5 a year to the "Guarantee Fund." He walks five miles to business, and five miles home. He never stirs out without his umbrella. He never exceeds twenty minutes for his dinner. He drinks water; "beer gets into his head." He has three holidays a year—Christmas day and Good Friday being two of them—and then walks to the office and back again to pass away the time. He runs about all day with a big chain round his waist, and a gouty bill-book in his breast-pocket. He marries, and asks for an increase of salary. He is told "the house can do without him." He reviews every day a long army of ledgers, and has to "write up" the customer's books before he leaves. He reaches home at nine o'clock, and falls asleep over the yesterday's paper, borrowed from the public house. He reaches £80 a year. He fancies his fortune is made; but small boots and shoes, and large school bills, stop him on the high road to independence, and bring him nearer to Levi than Rothschild. He tries to get "evening employment," but his eyes fail him. He grows old, and learns that "the firm never pensions." One morning his stool is unoccupied, and a subscription is made amongst his old companions to pay the expenses of his funeral. So much for clerkship!

THE PAWNBROKER'S WINDOW.

There is more philosophy of life to be learned at a pawnbroker's window than in all the libraries in the world. The maxims and dogmas, which the wise men have chronicled, disturb the mind for a moment, as the breeze ruffles the surface of the deep, still stream, and passes away; but there is something in the melancholy grouping of a pawnbroker's window which, like a record of ruin, sinks into the heart. The household goods, the cherished relics, the sacred possessions affection bestowed, or eyes now closed in death had once looked upon as their own, are here, as it were, profaned; the associations of dear old times are here violated; the family hearth is here outraged; the ties of love, kindred,

mk, all that the heart clings to, are broken here. It is a sad picture; for, in spite of all the glittering show, its associations are sombre. There hangs the watch, the old chased repeater, that hang above the head of a dying parent when bestowing his trembling blessing on the poor outcast who parted with it for bread; the widow's wedding ring is there, the last and dearest of all her possessions; the trinket, the pledge of love of one now dead, the only relic of the heart's fondest memories; silver that graced the holiday feast; the gilt-framed miniature that used to hang over the quiet mantel-shelf; the flute, the favorite of a dead son, surrendered by a starving mother to procure food for her remaining offspring; the locket that held a father's hair; or, gloomier still, the dress, the very covering of the poor, waving like the flag of wretchedness and misery. It is a strange, sad sight to those who feel a right. There are more touching memorials to be seen at a pawnbroker's window than in all the monuments in Westminster Abbey.—*Newspaper par.*

RAILROAD, CANAL, AND STEAMBOAT STATISTICS.

THE VERMONT CENTRAL RAILROAD.

THE Directors' report of this road was made July 1, 1848. It shows what had been accomplished at that time. The following is a brief abstract of the report:—

The Connecticut River Division.—This division extends from Windsor to the mouth of White River—15 miles. It is entirely graded, and the bridges are built ready for rails.

The White River Division.—This division extends from a point opposite West Lebanon, N. H., to Northfield—52½ miles. It has been graded, and the rails laid, so that the road is running order to Roxbury, within 10 miles of the depot at Northfield.

Winooski Division.—This division extends from Northfield to Burlington—50 miles. The amount expended up to August 1st, 1848, was \$514,321 42. The estimated cost of putting the road in running order to Montpelier is about \$150,000; and from Montpelier to Waterbury is \$180,000.

The road from White River village to Bethel, 25 miles, was opened for use on the 26th of June, 1848. The gross receipts for passengers and freight from that date to the 20th inst., will appear from the following statement:—

WEEKLY RECEIPTS OF VERMONT CENTRAL RAILROAD, 1848.

	Passengers.	Freight.	Total.
June 26th to June 30th.....	\$200 92	.....	\$200 92
Week ending July 8, (excursion 4th).....	615 93	\$132 49	748 42
“ “ 15.....	447 78	267 32	715 10
“ “ 22.....	404 63	481 07	885 70
“ “ 29.....	541 87	461 66	1,003 53
“ Aug. 5.....	651 79	456 17	1,007 96
“ “ 13.....	757 79	303 00	1,140 79
“ “ 19.....	867 78	308 00	1,174 78
“ “ 26.....	987 39	395 00	1,382 39
Total.....	\$5,475 88	\$2,883 17	\$8,359 59

CHEAP RAILWAY FARES IN ENGLAND.

If governments grant monopolies, and in the establishment of railroad routes it seems to be a necessary evil, they should also establish regulations to protect the public from unreasonable demands. The British government, it will be seen by the following paragraph, have adopted an order which will commend itself to the friends of justice and humanity everywhere:—

By order of the Commissioners of Railways, upwards of 170 cheap or third class trains now run daily on the railways of the United Kingdom, extending over more than 4,000 miles, the object of the legislature being to secure to the poorer classes the means of travelling by railway at moderate fares, and in carriages protected from the weather. By the act it is incumbent upon every railway company to run one such train every day, at 1d. per mile, and a speed of at least 12 miles an hour. Children under three years of age

are to be taken without charge, and under 12 years, for half the charge for an adult. Any neglect of these regulations subjects the companies to penalties, and deprives them of the benefit of the remission of the passenger tax, which is allowed on all cheap trains.

STATISTICS OF BRITISH RAILROAD LEGISLATION.

The following tables, derived from official sources, will give a concise and pretty accurate history of the progress and extent of the railroad movement in the United Kingdom. From 1826 to 1847, inclusive, 889 acts authorizing railroads were passed, with a capital of £326,643,217. Amount nominally raised or called up to the end of 1847, £166,938,241; amount of calls to the end of September, 1848, £28,378,865=£195,317,106. Liabilities still resting on the public in respect of railway projects not completed, £131,326,111.

AMOUNT OF MONEY AUTHORIZED TO BE RAISED, AND TOTAL NUMBER OF ACTS PASSED FROM 1826 TO 1847.

Years.	England and Wales.	Scotland.	Ireland.	Total.	Total acts passed.
1826.....	£920,600	£167,053	£600,000	£1,687,653	11
1827.....	126,600	125,008	.....	251,608	6
1828.....	424,000	.....	.....	424,000	8
1829.....	769,250	134,875	.....	904,125	9
1830.....	867,500	66,150	.....	933,650	8
1831.....	1,458,875	71,000	270,000	1,799,875	9
1832.....	557,685	.....	10,000	567,685	8
1833.....	5,505,333	20,000	.....	5,525,333	10
1834.....	2,304,000	8,053	.....	2,312,053	10
1835.....	4,588,333	195,800	28,700	4,812,833	16
1836.....	20,989,998	485,000	1,400,000	22,874,998	31
1837.....	10,654,166	1,435,633	1,464,000	13,553,793	27
1838.....	792,000	1,304,198	.....	2,096,198	10
1839.....	6,181,896	273,901	.....	6,455,797	16
1840.....	2,384,332	106,700	.....	2,491,032	16
1841.....	3,024,353	386,333	.....	3,410,686	15
1842.....	4,538,042	776,600	.....	5,314,642	16
1843.....	3,410,284	430,666	20,400	3,861,350	21
1844.....	15,599,781	1,684,499	1,733,390	19,017,580	48
1845.....	42,493,112	8,564,929	10,299,332	61,357,373	120
1846.....	101,592,696	16,642,563	10,751,455	128,986,714	227
1847.....	27,540,783	8,429,758	2,036,692	38,007,233	196
Total.....	£256,730,619	£41,308,719	£28,613,897	£326,643,217	889

LENGTH OF RAILWAY AUTHORIZED TO BE CONSTRUCTED.

Years.	England and Wales.	Scotland.	Ireland.	Total.
1826-1835.....miles	815	76	36	927
1836.....	875	36	68	979
1837.....	338	84	104	526
1838.....	3	46	.....	49
1839.....	50	.....	.....	50
1840.....	2	9	.....	11
1841.....	5	9	.....	14
1842.....	43	.....	.....	43
1843.....	41	4	.....	45
1844.....	642	68	122	832
1845.....	1,665	436	644	2,745
1846.....	3,348	851	710	4,909
1847.....	969	253	129	1,351
Total.....	8,796	1,872	1,813	12,481

BRITISH RAILROAD CALLS, CAPITAL, AND DIVIDENDS.

Companion to the British Almanac for 1849 furnishes the following statistics touching railway prices, calls, capital, dividends, &c.:—

has now, for three years, been an almost uninterrupted declension in the market railway property. It was dreaded by many cautious persons in 1845 that the sting recklessness would bring about disastrous results. The disturbed state of and commercial matters has undoubtedly contributed to this end; but it is indubitable that the depreciation is mainly due to the excessive absorption of capital in one species of enterprise; the much dreaded calls have drained away money which satily required in other quarters. It may be useful to take twelve of the older es, and compare the prices of their shares in one particular week of four succes—say the first week in August, which was about the height of the fever in 1845; also the prices for a later date. As three of the companies have each called up lional instalment on their shares within this period, we will adjust the prices to ,” shares, to render the comparison a fair one:—

	1845. August.	1846. August.	1847. August.	1848. August.	1848. Oct. 22.
and North-Western.....	£252	£210	£170	£114	£100
Western.....	246	165	125	92	77
Eastern.....	82	75	60	41	36
.....	180	140	120	94	66
Eastern.....	47	40	33	24	21
and Exeter.....	130	110	100	67	60
ire and Yorkshire.....	230	135	110	94	65
and Manchester.....	135	110	90	60	40
.....	80	63	50	28	25
d Berwick.....	55	42	36	30	21
d North-Midland.....	112	97	80	63	42
gh and Glasgow.....	87	73	60	37	36

average fall in the twelve companies has been 64 per cent in 3½ years. Prices ce rallied a little. In some of the new companies, and also in respect to some of shares in the older companies, the depreciation is still more marked. Some of as are now (October, 1848,) worth less than nothing—they could not be given to one would accept them as a gift, unless accompanied by a bonus in money to be acceptance. This occurs where there are still further “calls” to be made on es; the liability to which rests with those in whose names the shares are registere calls made on the stock of the new companies, and on the various kinds of new i the old companies, have been excessively heavy in the last two years. Frequent- nount has reached a million sterling in a single week. In the first ten months r to October, inclusive,) of 1847 the amount so called up was £31,955,355 for ailways, and £5,644,000 for British shares in foreign railways—making in the 37,599,355. In the first ten months of 1848 the calls amounted to £26,850,709 sh railways, and £3,102,071 for British shares in foreign railways—making in the 29,952,770. Bringing in the calls for the last two months of 1847, we find that y-two months (January 1, 1847, to October 30, 1848,) there has been paid by bareholders no less than £75,000,000 to the railway companies, or nearly £800,000 k. Nearly the whole of this has been expended, besides loans on debenture. The ovested in these undertakings has reached a most astounding amount. The fol- in round numbers, represents the share capital and the borrowing powers of all sh railway companies, according to the acts of Parliament which sanction them:—

	Acts.			Acts.	
1840.....	299	£69,000,000	1847.....	184	£35,000,000
1844.....	113	18,000,000	1848.....	83	18,000,000
.....	120	59,000,000			
.....	272	121,000,000		1,071	£320,000,000

arly all railways have cost more than the Parliamentary estimates, the share nd the borrowing powers will together more nearly represent the probable total han the share capital alone. There has been a feature in the railway system with- st twelve months which has been instrumental in depressing the market value of a, namely, the reduced rate of dividends paid by the leading companies. This

reduction has been brought about by four different causes:—1. The disturbed state of political and commercial affairs has considerably lessened the total amount of traffic in the country, both in passengers and merchandise. 2. By the opening of new and competing lines into particular districts, the portion of traffic which now falls to the share of the older companies is less than formerly. 3. Some of the old companies have leased or purchased particular lines on terms more lavish than the traffic has been found to warrant. 4. Some of the companies have issued new shares to pay off loans or debentures, which shares, by receiving dividends pro rata with the older shares, lessen the rate per cent receivable on each. From one or more of these causes combined, most of the old companies have been compelled to reduce the rate of dividend. The greatest of them all, the London and North-Western, has suffered a severe fall in this respect. In December, 1846, the dividend was at the rate of 10 per cent per annum; in June, 1847, 9 per cent; in December, 1847, 8 per cent; and in June, 1848, 7 per cent. The fall in the Great-Western has been from 8 to 7 per cent; in the South-Western, from 9 to 6; in the Midland, from 7 to 6; in the York and Berwick, from 9 to 8; in the York and North-Midland, from 10 to 8.

OSWEGO CANAL EXPORTS AND IMPORTS.

The imports of a few leading articles from the opening of navigation to December 1st, for three seasons, have been, says the "Oswego Commercial Times," as follows:—

	1846.	1847.	1848.
Flour.....bbls.	67,506	147,786	87,017
Wheat.....bush.	2,305,020	3,140,537	3,597,308
Corn.....	319,119	914,430	361,405
Lumber.....feet	25,696,651	32,390,845	34,055,326

Since the close of the export season by the St. Lawrence, the Canadian flour has most-ly come this way, which makes the receipts of flour at this port during the month of November about equal to the entire previous receipts of the season of navigation. A large portion of the flour received here during the season now drawing to a close has been entered as Canadian under the Warehousing Law. There is some flour and a number of cargoes of wheat to come in.

SALT.—The exports of salt from the opening of navigation to December 1st, for three seasons, have been as follows:—

	1846.	1847.	1848.
Barrels.....	285,238	341,324	399,683
Sacks.....	27,192	43,492	83,231

The exports for December will carry the total number of barrels shipped in the season of 1848 up to about 410,000, showing a large increase upon the exports of any previous season.

THE THREE GREAT RAILROADS OF ENGLAND.

We learn from the English papers that it is proposed to amalgamate the London and North-Western, Great-Western, and South-Western Railroads, an arrangement which will, if effected, create the most powerful combination ever known in Great Britain, and bring to one undertaking an amount of capital larger than any of her great national undertakings. The total amount of the capital of the amalgamated company will be £42,371,230, divided as under:—London and North-Western capital, raised by shares, £14,044,573; by loans, £9,186,672; total, £23,231,245. The shares in this company are 10,184 original shares, of £100 each, which are paid up; 55,000 London and Birmingham £25 shares, upon which £22 have been paid; 168,380 new quarter (£25) shares, upon which £7 only have been paid; 66,879 fifths, or £20 shares, on which £18 have still to be paid; 12,090 London and Manchester £40 shares, £25 paid and £15 due; 30,000 Manchester and Birmingham £10 shares, marked A, upon which £9 are paid; 60,000 ditto, marked B, £9 paid; 70,000 marked C, £1 paid. Consequently, the company have power to make calls to the amount of £5,251,012.

The capital of the Great-Western is £11,457,277; £6,478,221 being raised by shares, and £4,979,056 by loan. The share capital is divided as under:—25,000 shares of £100 each, £90 paid up; 28,000 £50 shares, all paid; 93,000 £25 shares, upon which £4 are still due; 37,500 £20 shares, paid up; and 69,700 new £17 shares, on which £13 have been paid. This company has still power to make calls to the amount of £761,400.

The South-Western Company has raised from shares £6,075,387, and by loans

£1,609,350, or a total of £7,684,737. The South-Western shares may be classed as under:—25,840 £50 paid up shares; 60,000 new £50 shares, upon which £42 10s. have been paid; 46,500 £40 shares, upon which £34 have been paid; 9,266 £50 consolidated tenths, paid up; 12,000 £40 consolidated tenths, paid up; 120,560 £16 13s. 4d. thirds, upon which £13 6s. 8d. have been paid; 147,766 new 7 per cent scrip, upon which £1 13s. 4d. only have been called up. This company has, therefore, power to make calls to the amount of £2,815,798 6s. 8d.

The amalgamated companies will, by their present powers, be entitled to call up, within the time allowed by the act for doing so, the sum of £8,819,201 6s. 8d. The entire weekly receipt of the three companies, should they not exceed their present average, will be £70,000 per week, or £3,640,000 per annum. The number of miles of railway over which the companies will have control will be nearly 2,000, upwards of 1,000 of which they will have in their absolute possession. The great company will, by means of their own and other lines, in which they are beneficially interested, have the entire traffic from Plymouth to Perth.

COMMERCIAL STATISTICS.

COMPARISON OF THE BUSINESS OF THE UPPER LAKE PORTS ABOVE BUFFALO.

No benevolent mind can fail to take pleasure in contemplating the rapid increase in numbers, comforts, and intelligence of the American Union. No nation, among all the great communities of men that are pushing forward to a higher physical and moral condition, is advancing with such rapid strides as these States. Dividing these into non-slaveholding and slaveholding, the intelligent man will feel no difficulty in deciding that the former are decidedly more flourishing than the latter. If, again, we divide the free States into old and new, it will be equally apparent that the new are pushing ahead much faster than the old. Of the new free States, that portion lying on the great lakes west of Buffalo has been improving faster, for some dozen years past, than any other large section. The causes of this superiority are permanent, so that no one need expect a change for very many years to come.

This favored region, scarcely known to commerce fifteen years ago, has suddenly become one of the leading granaries of the world. As yet, it is almost purely agricultural. But so great are its natural resources, and such the intelligent industry of its inhabitants, that it will, ere long, become a favorite home of commerce and manufactures. The variety and extent of its commerce is every year attracting the admiring attention of those who witness it. Its commercial points every year increase the circle of their commercial power. Although at present chiefly engaged in the exchange of the products of a new country for manufactures and the products of other climates, there is more variety in their commercial transactions, and more to characterize the business of each of their leading marts, than is generally supposed.

It is proposed, in this article, to exhibit these characteristics, as shown by the statement accompanying the report of the Executive Committee of the Chicago Convention. These statements, as near official as they could be made, exhibit the business of the year 1847.

We have examined and compared the business of the ten principal lake marts above Buffalo, and now give the results in tabular form:—

VALUE OF EXPORTS IN 1847.

1. Cleveland.....	\$9,033,155	6. Huron.....	\$2,293,010
2. Detroit.....	3,883,318	7. Monroe.....	1,139,476
3. Toledo.....	3,848,248	8. St. Joseph.....	833,917
4. Sandusky.....	3,438,530	9. Milwaukee.....	750,000
5. Chicago.....	2,296,299	10. Michigan City.....	not given.

All the foregoing are set down according to the facts furnished by the report of the Chicago Committee, except Milwaukee, for which we have made an estimate from the list of articles exported, as reported by that Committee.

Most of the articles passing through the port of Huron are shipped at Milan.

VALUE OF IMPORTS IN 1847.

1. Sandusky.....	\$7,147,261	6. Milwaukee*.....	\$1,500,000
2. Cleveland.....	4,505,096	7. Monroe.....	817,012
3. Toledo.....	4,033,985	8. Huron.....	not given.
4. Detroit.....	4,020,559	9. St. Joseph.....	517,056
5. Chicago.....	2,641,852	10. Michigan City.....	not given.

WHEAT EXPORTED IN 1847.

	Bushels.		Bushels.
1. Cleveland.....	2,788,543	6. Milwaukee.....	598,011
2. Chicago.....	1,974,304	7. Michigan City.....	520,647
3. Sandusky.....	1,818,754	8. Monroe.....	222,596
4. Huron.....	1,585,866	9. Detroit.....	202,055
5. Toledo.....	1,154,205	10. St. Joseph.....	150,617

BARRELS OF FLOUR EXPORTED IN 1847.

1. Cleveland.....	734,745	6. Sandusky.....	133,066
2. Detroit.....	614,707	7. Milwaukee.....	34,540
3. Toledo.....	164,219	8. Chicago.....	32,598
4. Monroe.....	156,829	9. Michigan City.....	not given.
5. St. Joseph.....	135,843	10. Huron.....	"

RUSHELS CORN, RYE AND OATS EXPORTED 1847.

1. Toledo.....	1,494,662
2. Cleveland.....	1,484,765
3. Sandusky.....	312,265
4. Huron.....	111,144
5. Michigan.....	96,487
6. Chicago.....	67,315
7. Detroit.....	14,088
8. St. Joseph.....	5,948
9. Monroe.....	2,973
10. Milwaukee.....	none.

BARRELS OF PORK AND BEEF EXPORTED 1847.

1. Chicago.....	48,920
2. Cleveland.....	32,793
3. Toledo.....	21,811
4. Sandusky.....	10,760
5. Michigan City.....	3,033
6. Huron.....	2,644
7. Monroe.....	2,197
8. St. Joseph.....	2,088
9. Detroit.....	1,911
10. Milwaukee.....	742

POUNDS OF BACON AND HAMS.

1. Toledo.....	3,341,132
2. Cleveland.....	840,900
3. Chicago.....	47,298
4. Sandusky.....	36,950
5. Detroit.....	23,916

The other ports none.

POUNDS OF LARD EXPORTED IN 1847.

1. Toledo.....	4,244,801
2. Cleveland.....	484,160
3. Sandusky.....	293,750
4. Chicago.....	139,069
5. Detroit.....	29,118
6. Monroe.....	13,031
7. Huron.....	2,755

The other ports none.

POUNDS OF TALLOW EXPORTED.

1. Sandusky.....	601,250
2. Chicago.....	208,435
3. Cleveland.....	140,000
4. Toledo.....	95,317
5. Huron.....	20,602
6. Monroe.....	2,630

The other ports none.

POUNDS OF BUTTER EXPORTED IN 1847.

1. Sandusky.....	946,400
2. Cleveland.....	917,090
3. Toledo.....	374,689
4. Chicago.....	47,336
5. Monroe.....	27,768
6. St. Joseph.....	6,600
7. Huron.....	2,704

The other ports none.

* Estimated.

POUNDS OF WOOL EXPORTED IN 1847.

1. Detroit.....	lbs.	760,616
2. Sandusky.....		634,106
3. Cleveland.....		575,933
4. Chicago.....		411,088
5. Huron.....		402,212
6. Toledo.....		157,869
7. Monroe.....		153,400
8. Milwaukie.....		43,215
9. Michigan City.....	sacks	175
0. St. Joseph.....	lbs.	15,400

POUNDS OF TOBACCO EXPORTED IN 1847.

1. Sandusky.....	700,000
2. Toledo.....	593,778
3. Chicago.....	28,243
The other ports none.	

POUNDS OF HEMP EXPORTED IN 1847.

1. Toledo.....	602,642
2. Chicago.....	6,521
The other ports none.	

POUNDS OF SUGAR AND MOLASSES.

Toledo	1,250,000	The other ports none.
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By the foregoing tables it will be seen that in value of exports Cleveland is far ahead of any other port, and that in wheat and flour exported, she occupies the first place. In the value of imports and the quantity of tallow, butter, and tobacco exported, Sandusky leads.

In amount of corn, rye and oats, bacon, lard, hemp, sugar, and molasses, Toledo is number one.

Detroit leads in amount of wool, to which we might add lumber. Chicago exports more beef and pork than any of her sisters.

In variety of articles received in considerable quantities for export, Toledo is first, Cleveland second, and Detroit third.

Hereafter, the Upper Lakes will be supplied with sugar, molasses, and raw cotton almost exclusively through Toledo and Chicago. The present season has witnessed a great change in the movement of these important articles, as the returns of the business of Toledo and Chicago will show.

In flour Detroit was excelled in 1847 by Cleveland, but this will probably never happen again. Detroit is now, and will long continue to be, the leading primary flour market of the Upper Lakes. Chicago promises soon to be the leading exporter of wheat, as she is now of beef.

In corn and pork, and all the articles made from the hog, such as bacon, lard, steirine, and oil, &c., Toledo will be the leading market and exporting town for all time to come. Her receipts of wheat and flour will increase on those of Cleveland; and, together, promise in a few years to equal those of the foremost of her sisters. In sugar and raw cotton her exports will probably, for many years to come, more than equal those of the other nine ports.

The coal business of Cleveland is destined to be large, as will also be the business in pine lumber of Chicago, Toledo, and Detroit. The population of the ten marts is nearly as follows:—

1. Chicago.....	20,000	7. Toledo.....	3,500
2. Detroit.....	18,000	8. Milan (Huron Port).....	3,000
3. Milwaukie.....	15,000	9. Michigan City.....	1,500
4. Cleveland.....	14,000	10. St. Joseph.....	1,200
5. Monroe.....	4,500		
6. Sandusky.....	3,600	Total.....	84,300

These cities and villages, in the aggregate, will double their population as often as once in five years. Some will exceed, and others will fall short of that period at duplication.

There can be no doubt that Sandusky, Toledo, Milan, and Michigan City will number twice their present population in about three years; while Milwaukie, Monroe, and possibly Detroit, may require a longer term than five years to double their numbers.

Much will depend on the pecuniary condition of the nation; but we deem it safe to calculate on an average duplication of our chief lake towns, taken together, in every period of five years,—taking a series of not less than twenty, nor more than thirty years.

ROCHESTER FLOUR TRADE.

The Rochester Democrat furnishes the statistical facts connected with the flour trade of Rochester, during the season of 1848, compared with former years:—

QUANTITY OF FLOUR SHIPPED EAST FROM ROCHESTER ON THE ERIE CANAL FOR FOUR SEASONS.

	1845.	1846.	1847.	1848.
April.....	41,925	26,071	.....	.....
May.....	43,519	57,404	127,059	93,279
June.....	34,069	42,506	74,938	67,585
July.....	41,159	37,869	78,390	54,958
August.....	52,218	51,437	61,965	67,753
September.....	73,751	90,656	74,473	92,396
October.....	129,199	104,839	111,030	98,949
November.....	102,478	129,450	103,713	108,865
December.....	.....	.....	.....	6,541
Total barrels.....	518,318	540,232	631,574	599,326

The peculiar state of the markets in 1846, induced many to retain their stocks of wheat until the next season, when they were thrown upon the markets, causing the unusual increase in 1847. The wheat for the supply of the mills is derived from three sources—the canals, the Tonawanda Railroad, and teams from the surrounding country. We present a statement of the quantity left at this point by the two canals:—

	Erie.	G. V.	Total.	Do. 1847.
1848.				
May.....	96,599	17,287	113,886	119,837
June.....	170,044	32,286	202,130	100,820
July.....	66,475	20,725	87,200	480,615
August.....	83,521	82,719	166,140	212,467
September.....	113,432	106,562	219,994	208,547
October.....	274,112	101,784	375,896	290,439
November.....	162,109	94,228	256,337	365,391
December.....	13,909	6,641	20,550	.....
Bushels.....	980,201	462,132	1,443,133	1,778,116

The receipts by the Tonawanda Railroad, which cannot be ascertained till the annual report is made up, December 31st, has generally averaged about 200,000 bushels, making the aggregate of wheat by canal and railroad, over 1,600,000 bushels. Lake Ontario has sometimes supplied a small quantity—never more than 20,000 bushels. The supplies by the two canals for a series of years are as follows:—

	1844.	1845.	1846.	1847.	1848.
Bushels.....	884,441	1,169,231	1,203,546	1,778,116	1,443,132

We have nearly one hundred run of stone in Rochester, about 90 of which are employed on flour. To obtain a correct idea of the flour movements at this point, we must add to the amount shipped east by the canal the quantity consumed annually by 30,000 or more inhabitants, and the quantity transported by the railroad during the interval of canal navigation. The latter varies according to circumstances, sometimes not exceeding 10,000 barrels, and sometimes double or treble that number.

The State derives a revenue of 180,000 per annum from the Rochester flour trade. This shows the value of the Genesee River. If we take into the account the 235,000 barrels of flour transported this year by the Genesee Valley Canal, most of which was manufactured on the same stream, and add to that the revenue derived from the various other articles manufactured by the Genesee water power at various points, we shall have something like a correct notion of the value of this river. Since 1826 it has poured into the State coffers more than sufficient to pay half the original cost of the Erie Canal; and yet, strange to say, it has ever encountered the determined hostility of the State authorities, who persist in diverting its waters at Mount Morris, to feed 36 miles of the Genesee Canal; while at Rochester another draft is made to supply 74 miles of the Erie Canal. The Canal Board has reported in favor of deepening the outlets of the little lakes south of us, to make good the deficiency in the Genesee, caused by the extensive diversion in favor of the canals; but the legislature has neglected to make the appropriation. We hope this winter the Canal Board will put an end to the exceedingly unwise policy of crippling the usefulness of by far the most profitable stream of water in the State.

SHIP-BUILDING IN THE UNITED STATES.

A correspondent of the Boston Mercantile Journal, residing at Salem, (Massachusetts,) furnishes the following statement of the number of each class of vessels built in the United States in the last thirty-three and a half years:—

Years.	Ships and barques.	Brigs.	Schooners.	Sloops and canal boats.	Steamers.	Total vessels.	Tons.
1815.....	136	224	680	274	...	1,314	154,624
1816.....	76	121	781	424	...	4,402	131,669
1817.....	34	86	529	391	...	1,073	86,393
1818.....	53	85	428	332	...	898	82,421
1819.....	53	82	473	242	...	850	79,818
1820.....	21	60	301	152	...	534	47,784
1821.....	43	89	248	127	...	507	55,856
1822.....	64	131	260	168	...	623	75,437
1823.....	55	127	260	165	15	622	75,008
1824.....	56	156	377	166	26	781	90,039
	591	1,161	4,367	2,444	41	8,604	879,858
1825.....	56	197	538	168	35	994	114,997
1826.....	71	187	482	227	45	1,012	126,438
1827.....	58	133	464	441	38	934	104,343
1828.....	73	108	474	196	33	884	98,376
1829.....	44	68	485	145	43	785	77,099
1830.....	25	56	403	116	37	637	58,094
1831.....	72	95	416	94	34	711	85,963
1832.....	132	143	568	122	100	1,065	144,539
1833.....	144	169	625	185	65	1,188	161,626
1834.....	98	94	497	150	68	937	118,330
	773	1,250	4,952	1,674	498	9,147	1,089,805
1835, 9 months.....	25	50	302	100	30	507	46,239
1836.....	93	55	444	164	124	890	113,627
1837.....	67	72	507	168	135	949	122,987
1838.....	66	78	510	163	90	808	113,135
1839.....	83	89	439	122	125	853	120,988
1840.....	97	109	378	224	64	880	118,309
1841.....	114	101	312	173	78	778	128,084
1842.....	116	91	273	279	137	896	118,894
1843.....	58	34	148	157	79	462	63,618
1844, 9 months.....	73	47	204	404	163	891	103,537
	792	734	1,507	1,944	1,025	7,905	1,045,418
1845.....	124	87	322	342	163	1,038	146,018
1846.....	100	164	576	355	225	1,420	188,904
1847.....	141	168	689	392	198	1,588	243,783
1848.....	254	174	701	547	175	1,851	316,076
	619	593	2,288	1,638	761	5,897	894,081

Average per year for 4 years, 223,520 tons.

RECAPITULATION.—Ships and barques, 2,775; brigs, 3,741; schooners, 15,314; sloops and canal boats, 7,650; steamers, 2,138; total, 31,616; total tons, 3,909,149.

Average in 29½ years about 105,000 tons per year.

In 1848, 110 more ships and barques were built than in any other year.

From 1801 to 1807, the tonnage built in the United States amounted to 774,922 tons, being an average per year of 110,703 tons.

PRODUCTION OF AMERICAN WINE IN THE WEST.

We copy the following statement in relation to a vineyard near Cincinnati, planted with roots in 1834 by the late Mr. Resor, and reported by his son to the Horticultural Society:

ENTIRE COST OF THE VINEYARD, (EXCEPT THE LAND,) WITH THE CULTIVATION AND MAKING OF WINE FOR NINE YEARS.

2,300 small vines.....	\$138 00
2,300 pales.....	46 00
1,000 pales replaced.....	20 00
Trenching ground and planting.....	80 00
Manuring last fall.....	30 00
Two months' work each year, 9 years.....	225 00
Extra work in making wine, 9 years.....	150 00
Interest on investments before crop.....	15 00
Total cost, 9 years.....	\$704 00

The quantity of wine made in nine years was four thousand and three hundred gallons, which Mr. Resor very moderately estimates at seventy-five cents per gallon from the press, although it is well known that the American wines at Cincinnati sell readily at one dollar and fifty cents per gallon when one year old. These nine crops of wine, at Mr. Resor's low price, amount to three thousand two hundred and twenty-nine dollars and fifty cents. Deduct from this amount the cost of the vineyard and cultivation, and we find a profit of two thousand five hundred and twenty-five dollars and fifty cents for the nine years, or two hundred and eighty dollars and sixty-one cents per year.

COST OF FARMING VINEYARDS IN THE UNITED STATES.

Ploughing and sub-soil ploughing.....per acre	\$5 00
100 bushels of lime, at 15 cents.....	15 00
403 vines, two years old, at 15 cents.....	60 45
500 chesnut or cedar posts, 8½ feet long, and the size of large fence rails, 8 cents.....	40 00
800 pounds of iron wire, No. 11, for trellis, at \$6 60 per 100 pounds.....	52 80
36 pounds of twelvepenny rails, at 5 cents.....	1 80
Planting out the vines.....	7 00
Digging holes and setting posts.....	10 00
Making trellis.....	7 95
Total.....	\$200 00

This cost will vary in different locations, according to the price of lumber, lime, and vines; but we feel confident that anywhere within one hundred miles of Philadelphia a vineyard can be put out for two hundred dollars.

COMMERCE OF CHILICOTHE, OHIO.

COMPARATIVE STATEMENT OF THE EXPORTS AND IMPORTS OF THE PRINCIPAL ARTICLES SHIPPED FROM AND RECEIVED AT THE PORT OF CHILICOTHE FOR THE YEARS 1847 AND 1848, DERIVED FROM THE SCIOTO GAZETTE.

SHIPPED.			RECEIVED.		
	1847.	1848.		1847.	1848.
Flour.....bbls.	49,891	26,042	M. Coal.....bush.	131,151	223,153
Pork.....	31,821	18,192	Coffee.....lbs.	414,974	446,798
Corn.....bush.	196,781	73,789	Crockery.....	83,072	187,824
Wheat.....	34,403	107,124	Pig iron.....	834,466	1,047,623
Bac'n & P'rk in b'lk.lb.	2,226,475	3,721,531	Iron.....	239,826	333,008
Coffee.....	32,242	18,480	Merchandise.....	1,661,569	1,716,527
Iron.....	293,596	310,643	Nails.....	222,706	211,251
" cast.....	42,761	129,634	Sugar.....	531,925	781,307
Lard.....	2,411,048	1,069,735	Tobacco, manufact'd.	117,214	131,451
Merchandise.....	165,202	204,933	Sundries.....	677,638	478,556
Sugar.....	60,815	45,136	Lumber.....feet	240,390	166,750
Sundries.....	851,179	711,922	Wood.....cords	1,102	1,597

STATISTICS OF THE PERIODICAL PRESS IN NEW YORK.

The "Independent," the first number of which made its appearance on the 7th of December, 1848, furnishes the following tabular statement of the number and circulation of newspapers and magazines published in the city of New York. The Rev. Leonard Bacon, of New Haven, the Rev. Joseph P. Thompson, of New York, and the Rev. R. S. Storrs, of Brooklyn, are the ostensible editors of the "Independent." The working editor is the Rev. Joshua Leavitt, the original editor of the New York Evangelist, and distinguished as an able advocate of cheap postage and other philanthropic reforms. No religious or secular journal in the country concentrates a greater amount of industry and talent; and the independent tone of the editors give assurance that the principles of progress will be represented in a fearless and able manner. "We have been at much pains to ascertain the exact issue of the newspaper and periodical press of New York in every form," says the Independent, "and we give the result of our inquiries in the following tabular view:—

No. of papers.	Aggregate regular issue.	Aggregate weekly issue.	Aggregate yearly issue.
13 Daily papers.....	125,200	754,200	39,218,400
9 Semi-weekly	27,450	64,900	3,374,800
9 Weekly, Orthodox.....	72,950		3,845,400
7 " liberal, R. Catholic, &c..	20,500		1,066,000
6 " Sunday.....	42,000		2,184,000
44 " miscellaneous.....	242,100		12,589,200
		377,550	
16 Monthly, religious.....	289,100		3,469,200
4 " miscellaneous	76,250		915,000
10 " magazines, religious	54,250		651,360
24 " " miscellaneous.....	133,359		1,600,284
4 Quarterly magazines, religious....	5,800		23,200
9 " " literary.....	27,755		111,020
1 Semi-annually.....	100,000		200,000
		1,196,650	
158 papers issue yearly.....			69,247,864

Number of reams of paper consumed, 147,095. The weight of all this paper is about 5,600,000 lbs., and its cost alone is above \$600,000.

WHEAT AND FLOUR SHIPPED AT BUFFALO AND OSWEGO,

IN EACH YEAR FROM 1835 TO 1847.

The following table will show the tons of wheat and flour shipped at Buffalo and Oswego from the year 1835 to 1847, and at Black Rock from 1839 to 1847, inclusive, together with the total tons of wheat and flour which arrived at the Hudson River from 1835 to the close of 1847:—

Years.	Buffalo. Tons.	Black Rock. Tons.	Oswego. Tons.	Total. Tons.	This State. Tons.	Total arrived at tide-water. Tons.
1835.....	15,935	.....	14,888	30,823	97,729	828,522
1836.....	24,154	.....	13,591	37,745	87,237	124,982
1837.....	27,206	.....	7,429	34,635	81,856	116,491
1838.....	57,977	.....	10,010	67,987	65,093	133,080
1839.....	60,082	7,697	15,108	82,887	41,796	124,683
1840.....	95,573	12,825	15,075	123,473	121,389	244,862
1841.....	106,271	24,843	16,677	147,791	53,569	201,360
1842.....	107,522	13,035	14,338	134,895	63,336	198,231
1843.....	146,126	12,882	25,858	184,866	63,914	248,780
1844.....	145,510	15,669	42,293	203,472	74,331	277,803
1845.....	118,644	17,066	44,560	180,240	140,223	320,463
1846.....	247,860	16,564	63,905	328,329	91,039	419,366
1847.....	380,053	18,466	87,329	485,848	65,357	551,205

BRITISH AND IRISH PRODUCE AND MANUFACTURES.

The following is a table of the total value of British and Irish produce and manufactures exported from the United Kingdom to various countries in the year 1847:—

United States of America.....	£10,974,161	Egypt; ports on Mediterranean	£538,308
Mexico.....	100,688	Tunis.....	697
Central America.....	86,983	Algeria.....	13,881
New Granada.....	145,606	Morocco.....	16,231
Venezuela.....	182,279	Western coast of Africa.....	528,420
Hanseatic Towns.....	6,006,366	Colonial territory of the Cape of Good Hope.....	688,208
Heliogoland.....	250	Eastern coast of Africa.....	13,751
British territories in E. Indies.	5,470,105	African ports on the Red Sea.	505
Islands in the Indian seas—		Cape de Verd Islands.....	4,145
Java.....	357,870	Ascension and St. Helena.....	31,378
Philippine Islands.....	104,486	Mauritius.....	223,563
Lomboc.....	307	Aden.....	11,488
British North American Cols..	3,233,014	Persia.....	929
Holland.....	3,017,423	British W. I. and Brit. Guiana	2,102,577
Brazil.....	2,568,804	Honduras British settlements...	170,947
Oriental Republic of Uruguay.	334,083	Foreign West India Islands—	
Buenos Ayres or Argent. Repub.	156,421	Cuba.....	896,554
Chili.....	866,325	Porto Rico.....	16,822
Bolivia.....	22,375	Guadaloupe.....	164
Peru.....	600,814	Martinique.....	196
Falkland Islands.....	2,088	Curacao.....	1,089
Russian settlements on N. W. coast of America.....	8,193	St. Croix.....	14,797
France.....	2,554,283	St. Thomas.....	386,599
Portugal proper.....	889,916	Dutch Guiana.....	1,466
" Azores.....	42,980	Hayti.....	192,089
" Madeira.....	33,853	Russia—Northern ports.....	1,700,733
Spain, Continental and Balearic Islands.....	770,729	" ports within the B. Sea	143,810
Canary Islands.....	30,689	Sweden.....	179,367
Gibraltar.....	466,845	Norway.....	169,149
Italy, Sardinian territories.....	355,366	Denmark.....	253,701
" Duchy of Tuscany.....	637,748	Prussia.....	553,968
" Papal territories.....	181,894	Mecklenburgh Schwerin.....	103,164
" Naples and Sicily.....	636,690	Hanover.....	147,357
" Austrian territories.....	537,009	Oldenburgh and Kniphausen...	26,080
Malta and Gozo.....	195,836	British settlements in Austria..	1,644,170
Ionian Islands.....	143,426	South Sea Islands.....	25,368
Kingdom of Greece.....	233,913	China and Hong Kong.....	1,503,969
Turkish dominions.....	2,363,442	Belgium.....	1,059,456
Wallachia and Moldavia.....	213,547	Channel Islands.....	542,191
Syria and Palestine.....	415,292	Total.....	£58,842,377

It will be seen by this table that out of fifty-eight millions of exports from the United Kingdom last year, twenty-three millions were to the New World.

AMOUNT OF BULLION IN RUSSIA.

Notwithstanding it is well known that Russia produces more gold than any other portion of the globe, the amount of wealth kept in the royal coffers almost exceeds belief. The Emperor Nicholas has always—by the aid of his almost exhaustless store, because being continually augmented from the mines—been enabled to assist nations, bankers, and merchants in the pressing hour of need. He has lately ordered the sum of 6,000,000 rubles (about £1,000,000 sterling) to be transferred from the vaults of the citadel to the treasury; the funds of which, from many large urgent circumstances, has become reduced from 30,000,000 to 1,140,000 rubles; after this deduction, there remained in the vaults the almost incredible sum of 109,588,595 rubles, being a larger amount of specie and bullion than is possessed by any other state. A decree has been issued by the Emperor to the effect that neither gold nor silver shall be exported to the continental states during their present unsettled position; but this, of course, does not extend to England. On the

other hand, we learn, from an accredited source, that there is plenty of paper always ready for issue; but as to the above wealth, no one in Russia has any belief in its existence. At the annual inspection several mercantile men are always present, but, it is said, they are only shown one or two bags open, and do not know what the others contain.

NAUTICAL INTELLIGENCE.

NEW CHANNEL IN THE WESER.

PARTICULARS OF A NEW CHANNEL BETWEEN THE RIVERS WESER AND TAHDE, FOR VESSELS OF A MODERATE DRAUGHT OF WATER, ARRIVING WITH A SOUTH-WEST OR DEPARTING WITH A NORTH-EAST WIND.

THIS channel is laid down with three red and one white buoy; on each of the three red buoys (Bojetonner) is an iron rod with a wicker basket, differing in color and shape from those in the old channel of the Weser and Tahde. The white buoy is a customary one, but likewise with an iron rod and wicker basket; at a later period this will be replaced with a Bojetonne.

Vessels on arriving have to keep the red buoys to the right, and the white one to the left.

The first red buoy (No. 1) bears S. E. $\frac{1}{4}$ E. from the Key buoy, in eight fathoms at low water; from thence the bearings are—

The Steeple at Wangeroog W. $\frac{1}{4}$ S., and the Light-house is to be run for to the N. of the Steeple.

The Minser Church.....S. S. W. $\frac{1}{4}$ W.

The Light-vessel (No. 1).....S. E. by E. $\frac{1}{4}$ E. at ebb tide.

The red buoy (No. 11).....S. E.

The second red buoy (No. 11) is in seven fathoms at low water near the Tahde Plate, which rises steeply; the bearings from thence are—

The white buoy (No. 10).....N. E.

The red buoy (No. 111).....S. E. $\frac{1}{4}$ S.

The steeple at Wangeroog.....W. $\frac{1}{4}$ S.

The Minser Church.....S. W. $\frac{1}{4}$ S.

The Light-vessel (No. 1).....S. E. by E. $\frac{1}{4}$ E. at ebb tide.

The red buoy (No. 1).....N. W.

The third red buoy (No. 111) lies in seven fathoms at low water; the bearings from thence are—

The eighth black or G buoy.....S. E. by E.

The Steeple at Wangeroog.....W. $\frac{1}{4}$ N.

The Minser Church.....S. W. $\frac{1}{4}$ W.

The Light-vessel (No. 1).....E. $\frac{1}{4}$ N. at ebb tide.

The white buoy (No. 0) lies in 4 $\frac{1}{2}$ fathoms at low water; the bearings from thence are—

The Steeple at Wangeroog.....W. $\frac{1}{4}$ S.

The Minser Church.....S. W. $\frac{1}{4}$ S.

The red buoy (No. 111).....S. S. E. $\frac{1}{4}$ E.

The red buoy (No. 11).....S. W.

The Light-vessel (No. 1).....S. E. $\frac{1}{4}$ E. at ebb tide.

The steering through this channel from the Key buoy to the first red buoy is S. E. $\frac{1}{4}$ E., and from thence S. E. till between the seventh black or F buoy, and the eighth black or G buoy, from thence in the old channel of the Weser, steering for the Mellum rather nearer to the F than to the G buoy, where there are scarcely three fathoms at low water.

The flood tide runs southerly into the river Tahde, and the ebb tide northerly. In navigating this new channel a pilot is to be recommended.

The bearings are by compass.

FLOATING LIGHT IN THE PASS OF WIELINGEN.

The following is believed to be a correct translation of a letter from C. D. Hoffschmidt, the Belgian Secretary of Foreign Affairs, dated Brussels, October 24th, 1848, addressed to Augustus Moxhet, Esq., the Consul General of Belgium in the United States.

On and after the 5th of November, 1848, a Floating Light will be stationed in the Pass of Wielingen, near the bank called Paarde Markt, bearing by compass, without allowance for variation:—

The tower of the town of Ecluse, South.

The tower Flessingue, East $8^{\circ} 26'$ South.

The Light of West Capelle, N. E. $5^{\circ} 37'$ E.

The tower of Lisseweghe, S. W. $\frac{1}{4}$ W.

The lantern will be elevated 33 feet above the level of the sea, and will present a red Light, visible in clear weather at the distance of eight or nine miles of 60 to a degree.

The vessel painted red will bear at her mast-head an elongated ball of the same color.

From the same date the Light of Heyst, situated in lat. $51^{\circ} 20' 22''$ N. and lon. $0^{\circ} 53' 50''$ E. from Paris, will present a white Light.

MAURY'S WIND AND CURRENT CHART.

[FROM THE JOURNAL OF COMMERCE.]

Practical navigation is deriving the greatest benefits from the developments made by Lieut. Maury in relation to the course and velocity of currents, and the direction and strength of winds. The important results already attained encourage the hope that, at no distant day, the duration of voyages in sailing ships may be calculated with a precision almost as great as in vessels propelled by steam; and that the occurrence of storms, and the direction of winds, on any given route, may be anticipated—thus enabling the sailor so to lay his course as to avoid alike the tempest and the calm, and guided by the light of science to reach his destined port in safety and with speed. In the practical application of recent meteorological discoveries, and of the truths of geometrical science, to the purposes of navigation, Lieut. Maury has essentially subserved the interests not alone of commerce, but of humanity, and deserves to be ranked among the benefactors of his kind. The ingenious method devised by him to secure a record of facts falling within the observation of mariners, by the Abstract Log, has proved more than adequate to the purposes which it was designed to accomplish, and has supplied a vast amount of varied information, which has suggested an extension of the plan of the work since the numbers comprising the North Atlantic Ocean were issued.

Lieut. M. intends to construct charts of the three great oceans after the plan of the Rio sheet, and to accompany the whole with what is called a Pilot Chart, a specimen of which for August and September is before us. The pilot chart is constructed thus:—Lieut. M. has many tracks more than the chart will hold even in colors; but to give the practical navigator the benefit of the experience of all of them, he has divided the ocean out into sections of 5° square. That is, each section contains 5° of latitude and 5° of longitude. For the sake of illustration, take the section between 25° and 30° W. from the Equator, and 5° N. He has the tracks of several thousand vessels across this section. Suppose that 500 of them are in the month of August. The direction of the wind, as each of these 500 found it, is entered in its appropriate column on his MS. chart, and when the whole is gone through with, the result is entered on a compass drawn in this section, so as to show at a glance the number of calms, the number of winds from the N., from N. N. E., N. E., and so on for every two points around the compass. The same is done for every month, and for every section of 5° square over the whole ocean.

Now, suppose that a vessel with this pilot chart wants to make a south course through this section in August, (or any month, but suppose for August.) The captain consults his pilot chart to see what his chances for head winds and calms are, and what his chances for fair winds. Out of the 500 entries, he finds that there are 20 calms, that the winds are 250 times from S. E., 20 from S. S. E., 10 from S., 6 from S. S. W., 4 from S. W., and 2 from W. S. W., and of course 188 from all other points. His chances, then, of a fair wind from a south course would be only 190 out of 500—odds against him nearly as 5 to 2.

He now looks to see how the chances would be for a S. S. W. course. The 250 S. E. winds are fair winds for this course, and the chances of a fair wind for this course would be 458 out of 500—odds greatly in his favor, nearly 12 to 1. He would then, in ap-

proaching this section, aim to make it where a S. S. W. course would be a good course ; and so of any other section, and any other month.

Thus, with the pilot chart, each navigator before sailing could lay off the route which would give him the most chances for fair winds. This pilot chart, of course, cannot be finished until the whole is completed, or until its author gets tracks enough through any section to enable him to arrive at the fair average of winds from each point during any month.

ACCURATE NAVIGATION.

The shoal on which the ship *Flavia*, reported in the *Courier and Enquirer* of the 5th, as having struck upon, is laid down in our chart of the Bahamas, published in 1845, in precisely the same latitude and longitude as he gives in his account. There are a great number of shoal spots in that immediate vicinity, and it is, in my judgment, best not to be found in that neighborhood.

Please give notice that the Light-house erected on Tucker's Beach was lit on the 1st of December ; it is a fixed Light, the tower is white, 45 feet high, and is about 220 yards in a southerly direction from the old boarding house, which is burnt down.

The Light is about 18 miles in a S. W. by W. direction from Barnegat Light. Vessels making it should not steer to the N. of N. E. until they make Barnegat Light.

This notice is deemed necessary as the land at Barnegat runs nearly in a N. by E. direction, and to one not acquainted, both Lights being of the same character, the Tucker's Beach Light would be apt to make him haul to the northward too soon.

Yours truly,

G. W. BLUNT.

JOURNAL OF MINING AND MANUFACTURES.

"THE FIRST AMERICAN MANUFACTORY."

An article with this title appeared in the December number of the *Merchants' Magazine*, embracing some interesting, although not entirely accurate statements, relating to the introduction of the cotton manufacture into this country. We refer particularly to the remark of the writer that "the Byfield Factory was the first regular establishment of the kind in America." Now, as it is our aim to record and perpetuate correct information on all topics within the range of our Journal, we are gratified to have it in our power to correct the statement made (inadvertently, no doubt,) by the writer of that article. The paper below comes from a source entitled to the highest credit—from a gentleman whose veracity and means of information are of such a character as to leave upon our mind not the shadow of a doubt as to the perfect accuracy of his statements.

TO FREEMAN HUNT, Esq., *Editor of the Merchants' Magazine, etc.*

DEAR SIR:—In the *Merchants' Magazine* for December, 1848, we notice an interesting account of the establishment of the Byfield Factory in Newbury, Mass., under the title of "The First American Manufactory."

The beginnings of a branch of industry now of such great and growing importance, and so deeply affecting the commercial and social interests of the country, can hardly fail to be regarded with interest. In this respect, the facts connected with the establishment of the Byfield Factory must be considered a valuable addition to the history of American manufactures.

It seems, however, to be demanded by the "truth of history" to state that the claim of laying the first foundations of the American cotton manufacture incontestably belongs to SAMUEL SLATER, who came from England in the year 1789, and introduced and established the whole series of machines patented and used by Arkwright for spinning cotton, by making them chiefly with his own hands, in Pawtucket, Rhode Island, in the year 1790.

Some attempts had been made previously to spin cotton by water-power, and some small machines for this purpose, of rude construction, were shown Mr. Slater on his arrival at Pawtucket, on which cotton had been spun from rolls prepared by hand in families ; the improved modes of preparing the cotton for spinning on carding cylinders and roving machines, on the Arkwright plan, being entirely unknown and unattempted. These ma-

chines Mr. Slater, on seeing them, pronounced quite worthless, as they undoubtedly were. The establishment of a small spinning-mill previous to 1793 is noticed in the account of the Byfield Factory, with the remark that the latter was, however, "the first regular factory."

This remark was probably made without due knowledge of the character of the first operations at Pawtucket, which, there is reason to believe, were at the highest point of perfection, both as to the performance of the machinery and the systematic details of management, to which the cotton manufacture had then reached in England, from one of the best factories, in which country they had been derived, of which Mr. Slater had been the principal manager up to the time of his departure, and to the perfection of which he was known to have largely contributed, by his skilful and systematic management.

Accordingly, the machines constructed by him and put in operation in Pawtucket in 1790, continued to be used without interruption, and without change of the original system, for nearly forty years, up to 1829, at which time the carding and spinning machines formed a part of an establishment of two thousand spindles, still existing in that village, called the "Old Mill." These machines were removed in the following year, the sale of Mr. Slater's interest taking place about that time.

It may be worth while to remark in this connection, that the impression generally prevalent, that the art of cotton spinning, as introduced into this country, was imperfect compared to that practised in England at the time, is erroneous, the fact being as stated above. The art of cotton spinning, with the best system of management then known, was introduced into this country by SLATER, in 1790, in all the perfection to which it had arrived in England at that time. . . .

LAKE SUPERIOR MINES.

The "*American Mining Journal*" furnishes the latest, and probably the most authentic accounts from these mines. The Cliff mine, it seems, has never presented a better appearance than at the time of writing. A few days previous, twelve tons of copper were raised, the purest that had ever been taken from the mine. The Lac la Belle shows some improvement, but no particulars were given. The North American presents very encouraging prospects. The vein which is now worked, is represented as being twenty inches in width, and most of the lode yields good stamp work. Several small masses of copper have of late been obtained, averaging about 500 lbs. in weight. An engine and stamps had just been received, and would soon go into operation. The Copper Falls was also looking much better. Several small masses of copper had recently been raised from the lower level of one of the shafts, and the end of the drift was very promising. The product of the mine for the month of October was 4,458 lbs. of copper, estimated at 70 per cent; and 15,500 lbs., estimated at 15 per cent.

GOLD MINES IN VIRGINIA.

We have had the pleasure of conversing with a worthy gentleman from Louisa, says the Richmond Enquirer, in relation to some recent and extensive discoveries of immense deposits of gold in that country. A late discovery on the land of Mr. Boxley, conducted by Messrs. Rawlins and Fisher, is said to surpass the mines of South America. The place is called "Ally Cooper's," about two miles south-west of the north branch of the Pamunkey River. Mr. Rawlins, the lucky finder, washed in a small pan in a few hours (not exceeding seven) between three and four hundred pennyweights, (94 cents to the dw't.) Mr. F. has also discovered a very rich mine at Tinder's, with the prospect of an extensive deposit or vein. The mine of Mr. T. B. Harris, wrought by Mr. G. W. Fisher, continues to yield richly, and a few hands are collecting from \$100 to \$175 per day. A few days since we saw a large bar of gold, weighing about 500 dw'ts., from the White Walnut Mine, said to be exceedingly rich. We trust that with the vastly improved process of extracting the gold, the good county of Louisa may derive large benefits from the precious minerals diffused through the hitherto poor lands.

IRON FACTORIES IN KENTUCKY AND OHIO.

One of the most important neighborhoods for the production of iron on the Ohio River, is at a place called Ranging Rock. Within a circle of twenty miles there are 30 furnaces, 20 in Ohio and 10 in Kentucky. The produce of all combined amounts, when in full work, to 60,000 tons per annum.

METALLURGICAL TREATMENT OF GOLD ORES.

TESTING—EXTRACTION—SILICEOUS ORES—WASHING SAND—RICH ORES—PYRITOUS ORES—
PARTING—WET PARTING—QUARTATION, HOW PERFORMED.

The information embodied in the following paper, derived from Booth's "*Encyclopedia of Chemistry*," now published in parts by Carey & Hart, of Philadelphia, will not be deemed inapplicable to the times, when, as at present, our countrymen are in the successful search of the "golden sands" of California:—

Testing. The simplest method of testing auriferous sand is to wash over carefully and repeatedly with water, agitating the vessel, so that the gold particles may subside, and decanting the water, so as to carry off the fine sediment; then to pulverize the residue finely and wash again, repeating this operation until all the gangue is washed away and only gold remains. Vein gold, not containing pyrites, may be similarly treated, beginning with pulverization. If the ore abound in pyrites, the best method is to pulverize, roast thoroughly, wash over, pulverize and wash again, until the gangue is nearly all washed away. The former method gives a tolerably close analysis, but it is more accurate in both cases to wash the greater part of the gangue away, dissolve the residue in aqua regia by the aid of heat, evaporate to a small bulk to get rid of nitric acid by adding muriatic during evaporation, filter, add a clear solution of copperas to the clear solution, and after standing 24 hours, decant the greater part of the liquor with care from the precipitated gold, treat the residue by heat with muriatic acid, filter, wash, burn the filter, and weigh the pure gold. Not less than one or two pounds of poor ore should be employed, unless with a very sensitive balance; and if the gold do not precipitate at first, indicated by a momentary darkening of the solution, it will do so by standing. Very rich ores may be smelted directly with borax, or litharge, and in the latter case, a little charcoal will reduce a portion of the lead, which then takes up gold and silver and must be cupelled.

Extraction. A. Siliceous ores. 1. Washing sand. Auriferous sand is sometimes washed by hand, (in Africa, Hungary, &c.) over an inclined plane with transverse parallel grooves, in the lowest of which the gold particles will be found mixed with sand; this should be pulverized and washed again to get pure gold. **2. Stamping ores.** Sand and gravel are sometimes washed by machinery, whereby the pebble and gravel are removed by sifting, and the fine sand washed as above, by the machinery. But the sand and vein ore are more frequently stamped fine with water, and the fine sand and mud stirred with mercury to amalgamate the gold. The sand is washed off, the liquid amalgam pressed in bags of fine canvas or buckskin, and the solid amalgam remaining distilled, mercury passing over, and gold being left in a spongy state. Much mercury is lost if it be introduced into the stamping mill, and hence the employment of several mills, Chilian, Mexican, Tyrolesian bowls, &c., to amalgamate the gold contained in the sand after leaving the stampers. A considerable quantity of gold is lost by any one of these arrangements, and a better plan is to amalgamate in revolving barrels. About 6 dwts. gold to the bushel pays the cost of extraction in the United States.

B. Rich ores. These may be first powdered and washed, and the residue smelted with borax, litharge, or other fluxes, or they may be picked by hand, powdered, and directly smelted.

C. Pyritous ores. 1. These are sometimes pulverized finely, and washed over to a small very rich residue. The pyrites deposited from the water is washed again, once or twice, then exposed for months in heaps to the air, again ground and washed over. This process is very imperfect. **2.** The pyrites is first roasted, then ground, and amalgamated; or it is smelted to concentrate it, with or without previous roasting, the resulting stone ground and amalgamated. **3.** The pyrites is smelted, with or without previous roasting, and the ground stone then fused with lead, which is eliquated and cupelled. If copper pyrites predominate, amalgamation is better than imbibition with lead and eliquation.

Parting. The gold obtained by any of these processes usually contains silver, which must be parted or separated, either in the dry or wet way. **A. Dry parting. 1.** With sulphur. The impure gold is fused and granulated in cold water, mixed with $\frac{1}{2}$ to $\frac{3}{4}$ of its weight of sulphur, kept heated for two hours or more without fusion, to form sulphuret of silver by cementation, then highly heated to fusion for one hour, to perfect the production of sulphuret and the separation of silver richer in gold; a little litharge is then added gradually, and the crucible slowly cooled, during which the greater part, 5-6 to 6-7, of the gold with silver collects at the bottom, (king,) and is separated by a hammer from the upper sulphuret of silver and lead, (called plachmal,) containing 1-6 to 1-7 of the gold; the plachmal is several times fused with litharge until all the gold is extracted. The kings

are fused with sulphur, &c., and when rich enough, subjected to quartation; the plachmal is fused with iron, forming sulphuret of iron and silver, which is refined.

2. With *crude antimony*. The alloy is fused in a glazed crucible with twice as much crude (sulphuret of) antimony, to which, when the content of silver is more than $\frac{1}{2}$, a suitable quantity of sulphur is added. The sulphur unites with the silver, copper, &c., and the antimony with the gold, the latter alloy sinking to the bottom. If the gold contain much silver, this operation is repeated, with less antimony, after previous calcination. By calcination in a muffle, the antimony is driven off as oxide; the alloy may be smelted with saltpetre, which is apt to occasion more loss of gold. The gold after calcination is fused with $\frac{1}{2}$ borax, $\frac{1}{4}$ saltpetre, and $\frac{1}{4}$ glass powder.

3. An obsolete method of parting consisted in stratifying the rolled or granulated alloy in a cement box with regal cement, composed of 4 pts. brickdust, 1 pt. common salt, and 1 pt. calcined copperas, and giving a slowly increasing heat for 18 to 24 hours. The sulphuric acid set from the vitriol disengaged from the salt muriatic acid, which formed chloride of silver and left a finer gold. The last was then cemented with saltpetre and common salt, whereby the remainder of the silver was extracted.

B. *Wet parting*. Parting by acids is superior to dry parting. 1. *Sulphuric acid*. This process, chiefly adopted in France, consists in heating the granulated alloy with oil of vitriol in cast-iron vessels, (or in less strong acid in platinum,) whereby sulphate of silver, copper, &c., is formed and dissolved, and gold left, which is again treated with sulphuric acid, washed, dried, and fused with saltpetre in black lead pots. This process is well adapted to large operations.

2. *Quartation* is performed by nitric acid, which, when free from muriatic or nitrous acid, dissolves silver and not gold, provided the alloy contains 3 pts. to 1 pt. gold. If it contain less silver, a portion must be added; if copper be present, the alloy must be cupelled. See Assay for the details of the operation. This process is only adapted for silver containing gold in nearly due proportion.

3. By *aqua regia*. Gold containing silver is treated with aqua regia made by mixing 1 pt. nitric acid of 32° B. (spec. grav. 1.28) and 4 pts. muriatic acid of 22° B. (= 1.178.) The granulated or laminated alloy is put into a flask, three or four times its weight of aqua regia poured over it, and digested until vapors cease to rise. The clear solution is poured off, the residue treated with 1 to 2 pts. aqua regia, this poured into the first, and the residue, chloride of silver, washed in a flask and then on a filter. A solution of copperas is then added to the gold solution, whereby metallic gold is precipitated, which is digested with dilute muriatic acid, washed, and fused with borax and saltpetre.

COST OF MANUFACTURING COTTON GOODS.*

The work, the title of which will be found at the foot of this page, embraces a collection of the most useful calculations for the Mechanic and Manufacturer; and it seems to us that its publication is particularly well timed, as efforts are being made to establish various branches of manufactures in the southern and western States, which will, we have no doubt, prove successful, and highly advantageous to the interests of the people in the region of the "sunny South and the fertile West."

Mr. Leonard's calculations on motive power are condensed and arranged in as comprehensive a mode as possible, so that the mechanic can obtain the solution of any problem, simply by referring to the tables. The information relating to water and steam power, and their application to various branches of manufacture, appears to be quite complete. The table which contains the calculated power of belts is, we are informed by the author, the first of the kind which has been published. That portion of the work relating to cotton manufacturing is particularly full, exhibiting the cost of machinery, and of building factories; and the tables, in showing the cost per yard of manufacturing different styles of goods from different prices of cotton, are predicated upon the yearly results of a large number of factories. It required no small amount of labor to perfect the work; its design, however, proposes a plan of arranging calculations which cannot fail to be of great practical utility to the mechanic and manufacturer.

* The Mechanical Principia; containing all the various calculations on Water and Steam Power, and on the different kinds of Machinery used in Manufacturing; with Tables showing the cost of Manufacturing different Styles of Goods. By CHARLES ELLERIDGE LEONARD. 12mo., pp. 197. New York: Leavitt, Trow, & Co.

ANALYSIS OF CALIFORNIA GOLD AND FORMATION OF THE MINES.

The following letter, from Professor Horsford, of Harvard University, was originally published in the *Mercantile Journal* of Boston. It will be read with interest, not only for the statement of the analysis of a specimen of the California gold recently received in that city, but also for the plausible theory therein advanced in relation to the formation of the gold fields:—

Cambridge, December 14th, 1848.

MY DEAR SIR:—The California gold, from Feather River, received by Mr. Eaton, has been analyzed, and contains gold, silver, iron, and a trace of copper.

It has been carefully examined for platinum, tellurium, and any other bodies that might have been present, but without success.

In constitution it corresponds with fifty other specimens, whose analysis are on record. The iron and copper are present in invariably small quantities, while the proportion of silver ranges from 1 per cent to more than 70.

The very small quantity employed in the analysis, (about 250 millegrammes,) and the four separate determinations, rendered a slight loss inevitable. The gold might safely be stated a little higher:—

Gold	88.09	Sand	0.40
Silver.....	10.00	Loss.....	1.11
Iron.....	0.40		
Copper.....	trace.	Total.....	100.00

You will remember that the specimen sent for analysis was in scales. The average weight of them may be of interest to you:—

62 scales weighed 205.5 millegrammes.

6 “ of least size, weighed 5.5 millegrammes.

6 “ of greatest size, weighed 51.5 millegrammes.

1 “ of least size, weighed 0.9 millegrammes.

1 “ of greatest size, weighed 8.6 millegrammes.

1 “ of average size, weighed 3.3 millegrammes.

The occurrence in this form, while the gold in the rock from which the scales have been derived, is, without doubt, in California as in Mexico and Virginia, in granules, of more or less approximation to a spherical form, presents an inquiry of much interest, viz: How have the granules become flattened?

From what I have seen of glacial action in the Alps, and of its effects in this vicinity, and in various other sections of northern United States, I am strongly persuaded that the flattening of the granules has been caused by the transit of glaciers, with their masses of imbedded boulders and gravel, over the rock containing the gold. It accomplished at one stroke the reduction of the rock to gravel and sand, and of the granules to plates. This will explain how, in the alluvial plain, here and there richer veins of the metal occur. The paths of ancient moraines, or rivers parallel to the direction of the glaciers, would contain more; the intervening spaces now filled up with lighter materials, spread about by subsequent simple aqueous agency, would contain less of gold.

This consideration may furnish a suggestion as to the direction from a point found to be rich in metal, in which labor will probably be rewarded. If the deposits have been made by glacial agency operating at right angles to the direction of the coast, excavation in a direction north and south must cross their course; excavation in a direction from or towards the mountain range would be either upon or parallel to their course, and would cross only the terminal moraines. I am, very truly, yours,
EBEN. N. HORSFORD.

DISCOVERY OF GOLD IN CANADA.

Professor B. Silliman, Jr., has published a brief account of his examination of masses of gold found in the valley of the Chaudiere, Canada. The lumps are worn smooth, as is usual in alluvial gold, but fragments of quartzose gangue could still be detected in some of them. They were firmly imbedded in what appeared to be slate, but which is probably a concrete of detritus cemented by oxide of iron. Chronic iron, titaniferous iron, serpentine, spinel rutile, and talcose rocks, remind us very strongly of the mineralogical characters of the Russian gold region; and their occurrence with the gold in Canada certainly affords favorable grounds for the hope that this may become a rich auriferous region. As yet, no excavations have been made on any scale of magnitude sufficient to warrant an opinion of the actual wealth of the deposit. A few tons of gravel have, however, been washed in a rude way with the Berks rocker, which have yielded about \$4 of gold to the ton of gravel.

PORTSMOUTH STEAM COTTON FACTORY.

A correspondent of the "Chronotype," who recently visited this establishment, furnishes the following statement, as the result of his investigation:—

The capital stock of this company, per charter, is \$1,000,000. Amount actually taken, \$530,000. This establishment was erected for the manufacture of the finer cotton fabrics. The middle section of the mill, 200 feet long by 70 feet wide, and six stories high, is now built, and contains over 21,000 spindles, all hand mules, and 500 looms; manufacturing lawns, organdines, plaid muslins, chambrays and ginghams, from yarns varying from No. 70 to 110. The product of the looms is some 23 yards each per day. Should the results of this section of the establishment prove satisfactory, (of which there appears to be no doubt,) two wings, 150 by 70 feet, and five stories high, will be erected, which will swell the concern to 50,000 spindles, 1,000 looms, and involve a capital of \$1,000,000. The whole appropriated to the production of fine cotton fabrics.

The number of girls employed in the mill at present is about 380. They are very healthy looking, much more so than in any other establishment of the kind I ever visited. Some of them are very beautiful to look at, intelligent to converse with, and dress like republican queens, which all of them are. The neatness which seems to characterize their persons, their modest demeanor, their close attention to business in the mill, and lady-like appearance when out—at lecture, in the ball-room, concert, or private circle—is the cause of universal remark, and what none with eyes can avoid observing and admiring.

In point of steam power this company have made an important discovery, which economists will be glad to learn. They commenced operations about two years and a half ago. They had employed one of Hill & Andrews' powerful horizontal engines of 24 inch cylinder and 4 feet stroke. They used the same until last August, when the company became dissatisfied with it, and substituted one of Tufts' largest size stationary engines, of the same size cylinder and stroke. The former consumed over eight tons of coal per day. Notwithstanding this extravagant consumption the machinery worked slowly; the operatives complained, particularly those who worked by the piece, about slow and unsteady speed. Tufts' engine has been in operation since August, and given general satisfaction. There have been no complaints whatever. The machinery works smooth, steadier, and quicker. But the most important fact with reference to these two engines is the cost of running. Where Hill & Andrews' engine requires over 8 tons of coal per day, Tufts' consumes less than 4 tons, and sufficient heat is also obtained to warm the whole building. This astonishing difference seems hardly credible, but figures won't lie, when made by disinterested parties. This fact, with reference to coal, was furnished me by the fireman of both engines, whose business is to economize for the company, but not to give preference to engine builders. The difference is attributed in part to a change in the mode of heating up. Slow combustion has proved more economical than quick, unsteady fires. But the main difference lies in the construction of valves. I was forcibly struck with the uncommon neatness and great beauty of this ponderous and wonderful construction. It is the largest horizontal engine ever manufactured by Tufts, except the one used in Forbes' propeller, which plies Boston harbor as a tow-boat.

Great neatness and regularity characterize every apartment of this monster establishment. More time is allowed the operatives for meals than at any other establishment with which I have yet become acquainted. The operatives are highly spoken of by the town's people, which I am sorry to say is not always the case in other manufacturing places.

MAMMOTH SCYTHE MANUFACTORY IN MAINE.

At North Wayne, in Maine, is situated the scythe manufacturing establishment of Reuben B. Dunn, Esq., the largest of the kind in the world. The establishment consists, besides warehouses, furnishing shops, &c., of three principal buildings for manufacturing, two of which are one hundred and forty-four feet each in length. In these, and in departments connected with the establishment, are employed about one hundred men, many of whom have families settled at the place. A flourishing village has grown up within a few years, and is rapidly increasing. Twelve thousand dozen scythes are annually manufactured, to produce which are required 450,000 lbs. of iron, 75,000 lbs. of steel, 1,200 tons of hard coal, 10,000 bushels of charcoal, 100 tons of grindstones, and half a ton of borax. The last article is used in the process of welding. The establishment is to be enlarged so as to turn out 17,000 dozen scythes annually.

FACILITIES FOR MANUFACTURES IN THE WEST.

To FREEMAN HUNT, Esq., *Editor of the Merchants' Magazine, etc.*

Will you permit me, through the pages of your valuable Magazine, to call the attention of those who take an interest in the subject of American manufactures to a pamphlet published by Hamilton Smith, Esq., of Louisville, Kentucky, relative to cotton manufactures, &c., on the Ohio? Mr. Smith is one of the most prominent and enterprising citizens of Louisville, and a first rate practical business man. The pamphlet alluded to comprises about seventy pages, and is well written. Its special object is to point out the superior advantages for manufacturing purposes connected with the place called Cannelton, about one hundred miles below Louisville, in the State of Indiana, and on the western bank of the Ohio River. The author has spread before his readers much valuable information on the subjects of coal, steam-power, water-power, cotton manufactures, &c.; and considering that he has not been practically connected with the manufacturing business, has evinced a far more correct and extensive acquaintance with its details than could have been expected. But Mr. Smith has a strong and comprehensive mind, and a sound judgment; and, under the guidance of these, his spirit of industry, perseverance, and research, has accomplished that which few others, under similar circumstances, would have attempted. The gentleman would confer a great favor on the friends of American manufactures by the publication of a second edition of his work; and in which he could correct and revise the few practical errors of the first, by means of data from authentic sources not open to him when the first was written. It would confer a favor especially on those who desire to see the cotton manufacturing business successfully and permanently established in our western country.

Mr. S. is a member of a corporate body recently organized, under an act of the Legislature of Indiana, for the purpose of prosecuting the manufacture of cotton goods at Cannelton, the place alluded to above. This company has a capital stock of \$250,000—all taken up. A contract has been closed for a mill of 10,000 spindles, to be commenced immediately, and to be put in operation during the coming year. Of all the localities in the United States for this business, there is probably no one equal to this, all things taken into the account. There is on the ground every desirable material for building, such as stone, timber, &c., in almost any quantity, as well as inexhaustible supplies of fire-stone and fire-clay. The situation is directly on the west bank of the Ohio, where the depth of the stream is from twelve to sixteen feet at low water, and is extremely handsome, picturesque, and salubrious. Provisions are abundant and cheap. It is in close proximity to the cotton-growing regions, and will command, as a market for its manufactures, the great valley of the Mississippi. But one of its most important advantages is an inexhaustible bed of coal, adequate to the generation of steam to drive millions of cotton spindles for centuries to come. And this coal, after careful analysis by Professor Silliman, Dr. Jackson, and other eminent chemists, is pronounced equal to the best cannel coal of Great Britain. This coal can be had on the spot for four cents per bushel, while an inferior article commands, in the New England market, *seventeen* cents. Thus, the fuel to generate steam-power at Cannelton will cost less, by *seventy-five* per cent, than on the Atlantic seaboard in New England. As about thirty bushels of coal make a ton, the cost per ton at Cannelton is *one dollar and twenty cents*. The transportation from Boston to Lowell is *one dollar and twenty-five cents*, in addition to *five dollars* per ton paid for the article in the Boston market.

One other advantage of much importance the manufacturer at Cannelton will possess over the manufacturer at the east, will very much enhance the profits of the former. A mill with ten thousand spindles will consume eight hundred and fifty tons of cotton per annum, and turn off five millions of yards of sheeting, No. 14—two yards to the pound. To transport this cloth from Lowell to Louisville costs one half of a cent per yard. That cost will be saved, of course. The transportation, commissions, insurance, wharfage, &c., on the cotton from New Orleans to Lowell will also amount to one half of a cent on a yard of cloth. These two items amount to one cent per yard, which, on the annual product, five millions of yards, will make an aggregate of *fifty thousand dollars* per annum—no less than one per cent on the entire capital of two hundred and fifty thousand dollars. Such a saving as this, the manufacturer need not be informed, is well worth looking after in such times as these.

There may be other localities in our country, not taken up, equal to this; but if there be any one now occupied, I have yet to learn the fact. Permit me to say, then, the reader is invited to peruse the pamphlet of Mr. Smith when he shall have issued a second edition, as I hope he will do, as I believe the first is exhausted, or to peruse the first if he can ob-

tain it. Having done so, and being desirous to invest his capital in the manufacturing business, he will, I venture to predict without hesitation, seek a participation in the stock of some one of the companies that will, ere long, spring up at Cannelton. The place, ere long, will become the Lowell of the West—probably the Manchester of America.

The title of the pamphlet alluded to is, "*The Relative cost of Steam and Water-Power; the Illinois Coal Fields; and the Advantages offered by the West, particularly on the Lower Ohio, for Manufacturing.*"

C. T. J.

MANUFACTURES IN THE SOUTHERN STATES.

We take pleasure in recording the evidence which is constantly afforded of late, in various parts of the country, that public opinion is thoroughly awakening to the value of manufactures in the South. The experiment which has been successfully made at Tuscaloosa and other portions of Alabama, in employing girls as operatives, fully bears out the views of the editor of the Augusta Chronicle and Sentinel, contained in the following extract:—

"With common prudence and perseverance, the regions of the country where cotton and human food are cheapest will be the most successful in fabricating all the heavier goods made of this great southern staple. Its manufacture in this State, we are assured by men familiar with the cost of growing cotton and making it into cloth, is more profitable than its culture at ordinary prices. We have watched the operations of the factory recently started in this city with lively interest. Appreciating the difficulties of a branch of business, at which so many new and raw hands would have to learn the trade, we feared that a supply of good white operatives could not be had to work in the mill. Much, too, has been said about the unwillingness of poor families to engage in this kind of employment. Experience, however, has happily falsified these sinister predictions. There are more applicants for work than the company can employ; and the success of Georgia girls in learning to spin, weave, &c., is most creditable to their tact, intelligence, and industry. There is one who earns regularly \$5 per week. She is the daughter of a widow woman, who, with the light labor of a little son some ten years old, added to that of herself, is in the receipt of some \$34 a month from this cotton factory. It must be borne in mind that neither of the three members of this small family is compelled to work a day longer in this establishment than is agreeable. We ask, is it no advantage to this community that its most needy families—and no one is above the possibility of want—be furnished with the means and situation to earn, without discredit or severe toil, each \$400 a year? That it is a great blessing to such families, no one will deny."

THE ROYAL SCHOOL OF MINES AT MADRID.

This splendid and most useful institution for the training of those who are about devoting themselves to mining operations, has received a grant from the government, for the purpose of extending its size, and also to establish a school of practical engineering, civil as well as mining—so that the pupils attending the lectures, or boarders in the college, may have an opportunity of becoming well acquainted with the different branches of these sciences. The School of Mines at Madrid has stood for many years pre-eminent among the institutions of Europe for the study of mining, as it is to Spain that Mexico, and, indeed, the whole of South America, from the time of the discovery of that vast and rich mineral continent of the New World by Christopher Columbus down to the throwing off the yoke of the mother country, is indebted for the extensive explorations and working of the mines, which have rendered so renowned in modern times, and in which, at present, so large a British capital is invested by the companies who continue the former works of the old Spaniards and primitive aborigines. The Spanish crown having lost the whole of her rich possessions, with the exceptions of the Island of Cuba, the Philippine Islands, &c., is now determined to turn to the utmost advantage its own local mineral resources—and to accomplish which, it not only gives great encouragement to adventurers, native and foreign, to embark in mining pursuits, but is also extending the opportunities for studying the science. The collection of minerals at Madrid is considered one of the finest in the world, and they are assorted with the utmost care by experienced mineralogists and travellers, who have collected specimens of every description of ores and minerals particular to each country which they have visited. The School of Mines of Paris, Vienna, Berlin, and even St. Petersburg, are making great additions; but that of Madrid

will not be inferior to any, as the engineering department will contain a select model-room of the various improvements which have been made in England in every description of machinery, but particularly those most applicable to mining operations, so that the pupils will have a full opportunity to study this branch of science.

CHARLESTON COTTON MANUFACTURING COMPANY.

This establishment has sprung up with most astonishing rapidity. It is not yet a year since the first ground was broken for the erection of the buildings—now the mill is almost in entire operation. The building, including wings, is 196 feet long, 50 feet wide, and 3 stories high. It is located in the most charming spot in the vicinity of the city; far enough from its noise and dust to be pleasant, and near enough to draw its supply of operatives. None but whites are employed in or about the mill, and the rate of wages will compare favorably with the northern factories. The capacity of the factory is 3,165 spindles and 100 looms. The cloth is of the best quality of goods from No. 14 yarns, weighing 4-4, 2,60 100 yards to the pound, 7-8, 3. 12 100. The machinery and engine are all of the most superb description, and the whole is now running in an admirable manner. Gen. C. J. James, the contractor for this machinery, certainly deserves the highest credit for his skill and faithfulness, and the confidence and encouragement of our Southern friends, who intend to start steam or water mills. The legislature of South Carolina have granted the privilege to this company to extend their capital to \$500,000, and it is probable they will soon commence other works in connection with their present operations. The officers are, James Chapman, President; James H. Taylor, Henry Cobia, Joseph Prevort, James T. Welsman, Directors; John W. Caldwell, Secretary and Treasurer; J. H. Taylor, Selling Agent.

PROCESS OF COVERING METALS WITH BRASS OR BRONZE.

M. M. Brunel, Bisson & Gaugain, propose the employment, in a solution of water, of 500 parts of carbonate of potash, 20 parts of chloride of copper, 40 parts of sulphate of zinc, and 250 parts of the nitrate of ammonia, instead of the cyanids before used. To obtain bronze a salt of tin is to be substituted for that of the sulphate of zinc. By these solutions, wrought or cast iron, steel, lead, zinc, tin, and the alloys of these metals may with facility be coated with brass or bronze after being scoured in a suitable manner, according to the nature of the metal. The process must be proceeded with at an ordinary temperature. Connect the article to be coated with the negative pole of a Bunsen battery, so that the positive decomposing pole be either a plate of brass or bronze. Metals thus treated will assume a beautiful appearance, equal in beauty to the finest bronze. Another very important advantage offered is their preservation from oxydation in the interior of habitations.

RICE CULTURE IN FRANCE.

This cultivation has been recently introduced on the Delta of the Rhone. It began in 1844 and '45 with one or two acres under the care of a single gardener. In 1847 there were 1,250 acres of land cultivated, employing 600 laborers, and producing 10,000 metric quintals of rice. In 1848 there have been 2,500 acres cultivated, employing 1,500 laborers, and bidding fair to produce 20,000 metric quintals. The irrigation was at first effected by a single pump moved by a horse. It is now effected by steam engines of 120 horse power. The Delta of the Rhone consists of about 450,000 acres, which is now nearly waste, being grazed over by a few cattle and wild horses. At least 250,000, by the cultivation of rice might be reclaimed, and be made to yield subsistence for 1,250,000 persons. A plan has been submitted to the National Assembly, whereby 87,500 acres may be secured from the Mediterranean and made available for this cultivation, by the employment of 5,000 men, at an expense of some 600,000 francs.

THE USES OF GOLD.

Gold possesses intrinsic value independent of its rarity. Its color, high specific gravity, ductility and malleability, fusibility, and resistance to chemical action, especially to atmospheric agents, render it very valuable, and the best medium of exchange. Pure gold is too soft for use as coin or plate, and hence the advantage of alloying it with copper, while

its specific gravity offers a means of testing its quality. Although a rare metal, its exceeding malleability allows its extensive employment for gilding surfaces at little cost, while its unalterability prevents such surface from readily tarnishing. For many objects of ornament and utility, electrotype gilding has superseded leaf and fire gilding.

MERCANTILE MISCELLANIES.

THE CLOTHING TRADE.

THIS branch of the manufactures of our country has of late years increased more rapidly and extensively than the great increase of our commerce and population would seem even to justify. It requires, however, but a glance at the causes to show that this fact is in keeping with the spirit of the age—at least in this country. The clothing trade throughout the Union has in a great measure swallowed up two other branches, namely, that of the cloth retailer and the merchant tailor, blending, as it were, the two branches. It used to be one job to seek for the cloth, and another to repair to the tailor, causing not unfrequently great loss of time and much vexation. We now see everywhere, not only the economist, but the man of fashion, saving his time and his money by procuring the very articles he requires all ready made to his hand. The growing importance of the clothing trade, and the fact that New York is the great centre of it, are sufficient to elicit from us more than a mere passing notice. We are credibly informed that New York supplies clothing for over two-thirds of the Union, the aggregate of the value of which is far greater than any other branch of manufacture in the city. The number of hands employed, or families supported in the manufacture of clothing in New York, we have no reliable data to show; but we will merely take a glance at one of the largest and most enterprising clothing establishments in our city, namely, the house of *D. & J. Devlin*, in John-street, as proof in part of the truth of our position.

The Messrs. Devlin do both a large wholesale, and a very extensive and fashionable retail, trade. Their establishment, at the corner of John and Nassau-streets, occupies two houses; one entire floor is devoted to the city and retail business; another to the cloth and custom department; another to the wholesale department; another, containing several well lighted rooms, to the cutting department; and the large basement is stored with their immense stock of heavy woollens and trimmings. The economy of such an establishment requires great attention to detail, and the admirable management of the enterprising proprietors is a model in its way. Their cutters are classified into four departments: one department exclusively for coats; a second for pants; a third for vests; and a fourth for trimmings; with a foreman, whose duty it is to supply the cutters with work, to employ hands, and to give out and receive the garments from them. The hands are also classed (according to their skill, capacity, and promptness) into grades—they earn from \$3 up to \$15 per week; and some piece-masters who have many hands under them, draw from \$25 to \$150 per week. The number of hands employed in working for this establishment, including those employed by the piece-masters, rarely falls short of 2,000, many of these supporting large families. They are scarcely ever out of work, for the wholesale and retail trade so dovetail into each other, that before the country trade is over, the city trade commences, and *vice versa*. Their corps of salesmen, clerks, &c., are well appointed and complete. This will give some idea of the importance of this manufacture in New York, and when we add to it the fact that the Messrs. Devlin, like many other establishments in the city, supply the retail merchants in the most widely separated States, North, South, and West, with stocks of clothing, especially suited to their various localities, and this to an unlimited extent, we hazard little in saying that the clothing trade is fast increasing in importance, not only to the manufacturing interests, but to the commerce of our country.

IMPORTANCE OF LOOKING AHEAD IN TRADE.

The editor of the *Dry Goods Reporter* reads editorially, in a late number of that journal, a very good lecture on the importance of caution and calculation in trade. Some of the deceptions practised upon themselves by young and inexperienced merchants, as to the result of their ventures, are illustrated in the following pertinent anecdotes:—

A young friend of ours called on us the other day in high glee; he was about concluding arrangements with two others to embark in the jobbing trade, and was quite sanguine of brilliant success. As we did not express full faith in his anticipations, he rather chided us for our doubts, whereupon we questioned him a little as to his prospects. At our suggestion he took pen and paper and put down first of all his proposed expenses. We could see that he had not done this before, as he seemed quite startled to find that even at the moderate estimates he had made, the total expenses for rent, clerk hire, and living of the several partners, amounted to the snug sum of \$8,200. "Now for the amount of business," said we. "Oh, as to that," he replied, "we *hope* to sell \$300,000 per annum." "But what amount of trade do all of you *at present* influence?" we asked; "make now a careful estimate of the business you can rely upon with some degree of certainty." He did so, and to his surprise it did not quite reach \$125,000. "Now what profit can you average upon this?" After some debate, this was set down at *seven and a half per cent*. This gave the sum of \$9,375. "Now what shall we call the losses?" These were settled at 2½ per cent of sales, amounting to \$3,125, leaving the nett income at \$6,250, or \$1,950 less than enough to pay his estimated expenses. He left us, proposing to show the estimate to his colleagues. He did so, and after figuring awhile without arriving at any more satisfactory result, they finally abandoned the undertaking. We have no hesitation in saying that if all who are about to embark in trade, would thus boldly look at the figures, instead of closing their eyes, and *hoping* for the best, we should hear of fewer disasters among business men, and there would be less complaint that "trade is overdone."

A friend of ours, in a season gone by, mentioned that he had ordered of the foreign agent a large lot of Belgian cloths; but upon being questioned he could not tell whether there was a scarcity in the market of that description of goods, or estimate within 20 per cent what it would cost to pay the duty and deliver them here; and of course was totally ignorant as to the relative difference between what they would cost him and their market value. He had ordered them for the name of the thing, without date or calculation of any kind: other people made money on cloths, and why should not he? The cloths would of *course* be wanted, and he should have to pay no more duty than any other man who might import them. We tried in vain to show him that a great deal of nice discrimination, and a thorough investigation of all facts that might bear upon the market value of such goods, or create a demand for them, were necessary to a successful venture. He had determined to be an importer, and we left him to the teachings of that most expensive tutor—experience. And dearly did the lesson cost him, for he realized a *loss* of about 20 per cent on his entire importation. He will "*look ahead*" before he gives another order of this sort, which he now very justly compares to *a leap in the dark*.

CAPACITY AND RESOURCES OF THE WEST.

The capacity of the West, from the Alleghanies to the Rocky Mountains, from the frozen lakes of the North to the tepid waters of the Gulf of Mexico! Every soil, every climate, every variety of surface. Of all the great products of the world, coffee is the only one which does not, or may not grow there. Take the people of Britain, Ireland, France, Holland, Germany, Italy, and Spain, and place the whole in the valley beyond the Appalachians, and it would continue to ask for "more." Ohio alone, without sinking a pit below the level of her valleys, could supply coal equal to the amount dug from the mines of England and Wales for twenty-five hundred years, and Ohio is but a pigmy, in the way of bitumen, compared with western Pennsylvania and Virginia. Iron abounds from Tennessee to Lake Erie, and forms the very mountains of Missouri and Arkansas. Salt wells up from secret store-houses in every northwestern State. Lead enough to shoot the human race extinct, is raised from the great metallic dykes of Illinois and Wisconsin. Copper and silver beckon all trusting capitalists to the shores of Lake Superior. And mark the water courses, the chain of lakes, the immense plains graded for railroads by Nature's own hand, the reservoirs of water waiting for canals to use them. Already the farmer far in the interior woods of Ohio or Indiana, may ship his produce at his own door to reach Boston, New York, Philadelphia, Baltimore, or New Orleans, and every mile of its transit shall be by canal, steamboat, and rail car.

MORGAN'S BOOK ESTABLISHMENT.

The following sketch of MORGAN'S, the great periodical depot of New Orleans, well known to all travellers and the "trade," is from a late number of the *Literary World*, a passage from a series of papers in that journal published under the title of the "Manhattan in New Orleans:"—

Literature (of a kind) and drinking rooms touch noses in cosy friendship in New Orleans. The same building that screens post-office mysteries from the vulgar gaze, protects an extensive depot for periodicals, and by its side a bar. Within this building every day much-abused Cave Johnson's clerks, and over-praised bar-boys, and the good-natured, smiling Morgan, vie with each other in their assiduity to customers. Few who visit New Orleans fail of knowing "Morgan;" a man who long since took the infection of good humor, and makes it contagious everywhere he goes. Turn into the Exchange building from Royal-street; in the passage way you pass the dirty man whose idiosyncrasy seems to lie in the manufacture and sale of buckskin purses and suspenders, upon whose wares press the crowd that patronize newspaper literature through the postman's little hole, behind which heaps of pennies darken the atmosphere; and the negro girl, with her flowers and cakes, and who is always knitting. (what it is you can't unravel;) and the cigar man—all of whom blockade the entrance to the post-office and bar (on which latter you turn your back to drop a letter or to call your box number), and make the passage in and out, a thing to be talked over for a day afterwards; and through a pushing crowd, (if 'tis steamer day, and every day is steamer day just now;) and holding your nose against the seductive savor of mint and lemons; and shutting your eyes to forlorn marine views and portraits hanging all about, (you'd think for sale, only there is no lunatic asylum in the vicinity;) after which you dodge through a smoky door, and there you are at "Morgan's." Straight before you on a table all the papers of the age—English, Irish, French, and Spanish; City, and New York; the Mammoth Weeklies, too; "Punch" nudging the "Nation;" "Yankee Doodle" grinning over the "Western Continent;" the "Sun" shining benignantly on the "Literary World," and the "Baptist Advocate" looking black-typed sermons for "Sunday Times." By their side a wooden box, into which merrily drop the silver coin, as the crowds go by. Further on, the modern novels, not to be counted, but for measurement by the yard. Around a little railed in corner, the magazines. Hard by them the yellow-covered literature of the day—translations from the French, no way improved in morals by their transition from sparkling Parisian to slow-coach English. In sundry corners, cobweb-penned and shadow-darkened, stand in military array editions of annuals and school-books. Leaning over the various counters a listless crowd. A nervous lady is dipping into Godey, and her hat-ribbons instinctively fly out; as she unrolls the fashion plate. A medical student almost makes your heart to bleed, so brow-knittingly he pores over the "Lancet." An English cotton-broker is chuckling over the torism of Backwood; his Irish neighbor scratching his head enthusiastically over the "Dublin Nation." Divers Hoosiers, deeply absorbed in the pages of some such tale as "The Eagle of Popocatepetl," or the Cave of Blue Rain," with covers quite "sicklied o'er with the pale cast of thought." Penniless loungers resting by the hour, and criticising half audibly as they go, as independent as if good-natured Morgan, whose arm trembles with the wrappings and tynge up it suffers minute by minute, had their reading's worth all snugly nested in his money box, and they with an hypocrite receipt upon their day's conscience.

A YANKEE'S METHOD OF SELLING GOODS.

The following anecdote has been going the rounds of the newspaper press without credit. As it is too good to be lost, we venture to give it a more permanent record in the pages of the *Mercantile Magazine*—

One Mr. P.—G., a gentleman of quality, well known to many citizens of New Hampshire is a successful merchant of C. owed much of his good fortune to his knowledge of human nature, of which he always endeavored to take advantage. Once he, with another person, opened a "country store" in a town in the north part of the State, which was mostly filled with the articles the goods from the principal store in C. These goods were as "good as new" among the masses, and sold quite as well, if we except a large lot of that wretched article of "gentlemen's wear" denominated by-skin caps. By the way, we remember of wearing *one* of 'em ourselves, and the reader of course is also aware what a by-skin cap is, or was.

He generally kept himself at his home in C., but when visiting his country store, staying

sometimes a week or more, and attending the country church; and, as a matter of course, was looked at with astonishment by the go-to-meeting young men of the town. Indeed, he was honored by their imitation in all his acts, dress, &c. What Mr. G. wore to church of a Sunday, gentleman as he was, was the prevailing fashion there until he introduced a new style at his next visit.

G. asked his partner about the business prospects and other matters in which he was interested, and received the reply that things went pretty quick at good prices.

"Keep those old caps yet. I didn't make a great bargain in buying them," said G. espying a large box filled with the caps. "Can't you get rid of them at any price?"

"Haven't sold one yet; people don't like them, and I have had a great notion of throwing them out of the back window, and getting rid of the trouble of them. They won't go here I think."

G. looked at them a moment, and exclaimed, "I have it! You have kept them out of sight, I see! Next Monday you get them out and brush them up, and I'll send you a score of customers before the week is out."

The next Sunday G. appeared in church with one of these identical hog-skin caps tipped gracefully on one side of his head, and a splendid gold watch chain dangling from his vest pocket. He was, as usual, the observed of all observers; and it is needless to say that a fortnight after, when in his own store in C., he received an order for two dozen more of his "imperial" caps.

SYSTEM OF NEATNESS IN THE SALESROOM.

We have been very much surprised in calling on merchants of our acquaintance, says the merchant editor of the *Dry Goods Reporter*, to witness the slovenly appearance of their salesroom. Heaps of goods were lying here and there in heterogeneous masses—cobwebs, coatings of dust, and odds and end of all sorts occupying the window-seats, while groups of lazy clerks were *leaning* or *sitting* upon the most convenient piles of goods. This latter habit is never allowed in any country except this. It is owing, doubtless, to the fact that the duties of a salesman or shopkeeper are seldom properly learned before the boy must be a man and set up in business for himself. A well-taught warehouse-man or clerk will *never leave elbow prints* upon a pile of calicoes, or *sit* upon goods exposed for sale. If a boy cannot be broken of this habit, he should be discharged at once. It is as intolerable as it is frequent, and every merchant ought to take the matter in hand and correct it by some means. It is an old adage that "goods well bought are half sold." Be this as it may, it certainly gives another turn to the wheel to have them handsomely arranged, and looking *fresh* and new. In defiance of this self-evident truth, we have seen some merchants tolerate such treatment of their stock by clerks and visitors, that a purchase two or three days old looked as if it had "kept shop" since the flood. The store or show-room should, in the first place, be thoroughly *cleaned*, then it should be *kept so*, by all proper care and neatness. Goods should be arranged with good taste and an eye to the general effect. Every one *employed* in the store should be made to stand on the support nature gave him, or if he be weak or lame to sit on a stool or in a chair. If visitors annoy by sitting, leaning, or lounging upon the goods, placards should be put up forbidding it; and a person who has so little good taste, or so much carelessness as to offend in this way, should not take umbrage if he be reminded of his fault. And finally, clerks should be *educated* in this as well as many other respects before they are considered competent to *graduate*. Learning the private mark upon the goods, and being able to call all the customers by their right names, do not constitute the trade of a salesman any more than the cultivation of a mustache. Long years of *laborious practice* under *good instruction* will alone accomplish it, and it were well if this were more generally understood.

CHANGE IN BUSINESS.

Generally speaking, who are the men who have made the most money, and stand the highest in the community? Are they those who have stuck to one kind of business—no matter what—without branching off in one direction and another? How often do we find men bred to one kind of business, which they have diligently followed for years, entering other pursuits, and changing their whole course, and thus losing all they had before made. Ministers turn merchants, block-makers become ministers—mechanics, tradesmen, &c., and very few are benefitted by the change.

We would advise all to stick to the business most appropriate to their talents; for in no other way can they succeed. There is more honor and virtue and true glory on the shoe-maker's bench than in the pulpit, where the former business is more appropriate to the

talents of the individual. There is too great a disposition to change among the Yankees. There is no business which, if continued in diligently, would not yield a good living. Poverty generally is the result of change and miscalculation. Even if one kind of business should be just as profitable as another, who would not rather be the first rate shoemaker in the place, or the first joiner, than a fourth rate namby pamby preacher?—*Port Tribune.*

A MAN WHO HAS FAILED.

Let a man fail in business, what a wonderful effect it has on his former friends and creditors! Men who have taken him by the arm, laughed and chatted with him by the hour, shrug up the shoulder and pass on with a chilling "how do ye do." Every trifle of a bill is hunted up and presented, that would not have seen daylight for months to come, but for the misfortune of the debtor. If it is paid, well and good—if not, the scowl of a sheriff, perhaps, meets him at the first corner. A man who never failed, knows but little of human nature. In prosperity, he sails along, gently wafted by favoring gales, receiving smiles and kind words from everybody. He prides himself on his good name and spotless character, and makes his boasts that he has not an enemy in the world. Alas! the change. He looks at the world in a different light, when the reverses come upon him. He reads suspicion on every brow. He hardly knows how to move; or whether to do this thing or the other, for there are spies about him, and a writ is ready for his back. To understand what kind of stuff the world of mind is made of, a person must be unfortunate and stop payment once in his lifetime. If he have friends, then they are made manifest. A failure is a moral sieve; it brings out the wheat and shows the chaff. A man thus learns that not words and pretended good will constitute real friendship.—*D. C. Coleworthy.*

LONDON AND OTHER SHOPS.

When Charles Lamb was asked his opinion of the Vale of Keswick and the Hills of Ambleside, he frankly acknowledged that there was more pleasure for him in the London shop windows, when lighted up and full in the frosty evenings before Christmas. This answer, though odd and unexpected, is not surprising. Where, in the wide world, is there such an exposition of artistic wealth and magnificence as is seen daily in the London shop windows? No doubt some of the shops of Paris and New York rival anything of the kind in the British metropolis; but, taken as a whole, the stock and the array of the London shops are unmatched. All Orientals and Africans, on visiting Europe for the first time, are most struck with the splendor of the shops. There was nothing unreasonable in the request of an African king's son, whose tribe had been serviceable to the French settlements on the Senegal, in return for which the young prince was taken under the protection of Louis XIV., and sent to receive an education in Paris. After having seen and been astonished at the French capital, Louis inquired of him what would be the most desirable present for his father, promising that whatever he selected should be sent; when the youth exclaimed, with a look of the most imploring earnestness, "Mighty monarch, let me send a shop!"—*Chambers.*

A CURIOUS CUSTOM-HOUSE CASE.

A merchant in London recently entered 700 foreign watches, apparently gold, for payment of duty, valuing them at £770, and at that rate offering to pass them for duty. The custom-house officers, conceiving them in their wisdom to be much undervalued, took the watches to account, and paid the merchant importer the £770, with the 10 per cent legally exigible and additional in such case. On Thursday, (November, 1848,) the watches were, in the usual way, put up to auction at the Commercial-rooms, Mincing-lane, when for the first time it was discovered that the watches were of brass, tinselled over with gold, and not worth £70. It remains to be seen whether the loss in this, as in other cases, will be charged to the Treasury, the profits, when such there are, being always taken to account of the customs fund.

STATISTICS OF FOREIGN RAILROADS.

At the end of the year 1847, 1,395 miles of rail had been opened in France, 3,891 in Germany, 546 in Belgium, 342 in Italy, about 250 in Hungary, 213 in Poland, 183 in Holland, 138 in Denmark, 51 in all Russia, and 18 in Switzerland.

THE BOOK TRADE.

- 1.—*The Romance of Yachting: Voyage the First.* By JOSEPH C. HART, Author of "Miriam Coffin," etc. New York: Harper & Brothers.

The object of this volume harmonizes so well with the design of the Merchants' Magazine, that we should be tempted to dip into its pages at some length, were we not quite sure that a large portion of our readers will enjoy the luxury of reading the entire work. To sail a ship scientifically, to contribute to the pleasure and comfort of passengers at sea, to do justice to the American commanders, and to elevate them, and to render to the merchant service its due meed of meritorious regard, appears to have been the leading object with the author. Yet Mr. Hart, evidently master of the subject he treats of, has not confined himself entirely to matters of a technical nature. He has gone into Spain and brought away much historical and other information, which it is pleasant to hear related from his vigorous pen. The author of the "Romance of Yachting" may well suppose, as he does in his preface, that his work will be found in the hands of most people travelling by sea; for the great amount of information which he furnishes, in regard to the phenomena of the ocean, is quite familiarly illustrated, and will be sought after with avidity by passengers and yachters generally.

- 2.—*The Moral, Social, and Professional Duties of Attorneys and Solicitors.* By SAMUEL WARREN, Esq., F. R. S., of the Lower Temple, Barrister at Law. 18mo., pp. 306. New York: Harper & Brothers.

The high reputation, literary and legal, which the author of this volume has so justly acquired, will secure for this last production of his pen a very general popularity among the members of the bar in England and America. It consists of a course of lectures on the moral, social, and professional duties of attorneys and solicitors, delivered in the Hall of the Incorporated Law Society of the United Kingdom. The lectures are well calculated to maintain the station and character of the profession, and especially to stimulate and benefit its younger members, by aiding and directing their study of the law, and promoting honorable practice. A leading object of the author is, to show both attorneys and solicitors, and their clients, what are their reciprocal rights and duties; that both parties are bound to be honorable, liberal, reasonable, and conscientious in their professional intercourse and dealings with each other; and, in a word, that the true interests of the public and the profession are identical.

- 3.—*History of King Charles the First of England.* By JACOB ABBOTT. With Engravings. New York: Harper & Brothers.

Another of Abbott's admirable series of histories. No one better understands the intellectual wants of the class for whom he writes than Jacob Abbott. His style, without being puerile, is simple and elegant. Although this work is designed for the young, there are few more advanced in years or in intellectual culture who will not find the present history an agreeable, if not profitable companion for "leisure hours."

- 4.—*Our Cousins in Ohio.* By MARY HOWITT. From the Diary of an American Mother. New York: Collins & Brother.

There are children who prefer truth to fiction, especially when the former is arrayed in the pleasing garb of the latter. Now this book, says the compiler, "is entirely true," and we have no doubt will interest the child and satisfy the parent. It is the twelve months' chronicle of the domestic life of a beloved sister of Mary Howitt, who emigrated to Ohio some years since, but who has recently been removed to another, if not better world. This is the record of her last year on earth. It is an interesting and instructive diary of scenes and events, rural and domestic, rendered pleasant and happy by all those social virtues and affections that lend to a country life all its charms.

- 5.—*The Old Stone House; or the Patriot's Fireside.* By JOSEPH ALDEN, D. D. New York: M. W. Dodd.

The design of this little work is to inspire the young reader with the spirit of patriotism, by disclosing to him, in a clear and attractive form, some of the elementary principles of the science of government, and the origin and formation of the Constitution of the United States. The pleasing narrative is here rendered subservient to the cause of patriotism, intelligence, and virtue.

6.—*Illustrated Poems.* By MRS. L. H. SIGOURNEY. With Designs by FELIX O. C. DARLEY. Engraved by American artists. 8vo., pp. 400. Philadelphia: Carey & Hart.

This volume most deservedly takes a very high position among the many illustrated books of the season, and in fact we have never seen the efforts of designers, engravers, printers, paper-makers, and binders united with such triumphant success. Mr. Darley, in his delicate and appropriate designs, has fairly out done all his former productions, and placed his reputation for this style of illustration upon a firm and enduring footing. In the engraving of these designs, the services of the most celebrated engravers of our land have been engaged, and the mere mention of the names of Cheney, Cushman, Humphreys, Douglass, Armstrong, Smillie, and Hinshelwood, will be sufficient. Where all the plates have been executed in a manner so exquisite, it would be a difficult matter to decide which were the most beautiful, and we have no desire to particularize between a succession of such gems. Persons of different tastes will prefer different illustrations in the book, and there is at the same time a sweet harmony running through the whole. The printer and paper-maker have taken care that their departments shall not suffer by, and be unworthy of, association with such fine specimens of art, and we here have the very luxury of letter-press. It would be unnecessary for us at this late day to attempt to add one tittle to the already high reputation of the authoress, who stands perhaps more prominently before the public, with an enviable reputation, than any other poetess of our country. We admire the neatness with which Mrs. Sigourney has dedicated her volume to the poet Rogers, which is this:—"To Samuel Rogers, the most venerable poet of Europe, and the friend of America, whose strain read in the solitude of early years, and whose kind words to the stranger in his own home, are alike held among the 'Pleasures of Memory,' this volume is respectfully inscribed."

7.—*The Female Poets of America.* By RUFUS W. GRISWOLD. 8vo., pp. 400. Philadelphia: Carey & Hart.

Mr. Griswold has made greater and more important contributions towards preserving a record of the literature of America than any other man in the country, and we are happy to know that the public have shown a just appreciation of his efforts, in the very liberal patronage extended towards those books, "*The Poets and Poetry of America*," and "*The Prose Writers of America*." In the present volume he has given selections from more than ninety of the poetesses of America, the writings and even the names of some of whom had almost been lost in the lapse of time, and in the dusty shelves of old libraries. Accompanying these selections are ably and vigorously written biographical and critical notices of these authoresses and their poetry. This collection will be found a rare addition to our literature, and we have seen none so full, both as regards the specimens and the information contained in the remarks of the editor. The work has in every respect been edited in an able and independent manner, although there are those who will be dissatisfied that they have not themselves been included, but this must of necessity be the case. Such a task could not be performed in a proper manner without giving offence to some. In point of mechanical execution this volume is exceedingly neat and beautiful. It is illustrated by engravings in the first rate style of the art; the paper upon which the work is printed is of fine white texture, while the type is clear, and the binding handsome.

8.—*The Female Poets of Great Britain, Chronologically Arranged; with Copious Selections and Critical Remarks.* By FREDERICK ROWTON. With additions by an American editor. One volume, 8vo., pp. 500. Philadelphia: Carey & Hart.

Mr. Rowton has here presented us with admirably selected specimens of nearly one hundred of the most celebrated female poets of Great Britain, from the time of Lady Juliana Berners, (1460,) the first of whom there is any record, to the Mitfords, the Howitts, the Cooks, the Barretts, and others of the present day. His biographical and critical sketches furnish at the same time, in one unbroken chain, a very good historical view of those different women who have contributed to the poetical literature of England during four centuries of her existence. In addition to the able manner in which the duty of the editor has been performed, the work, as a specimen of book making, is truly beautiful. Such paper, typography, binding, and illustrations as to leave nothing for the most fastidious taste to desire. The volume is gotten up in a style differing but slightly from Messrs. Carey & Hart's series of illustrated poets, among which are included Longfellow, Bryant, Willis, and more recently Mrs. Sigourney. The illustrations in the present work are ten in number, including a portrait of Miss Landon, and one from pictures by MacIae, Sully, Huntington, Leutze, Malbone, and Howse, possessing great beauty both as regards designs and engravings. In conclusion, this volume unites both the useful and ornamental; and there are few books, if any, that would serve for a more neat or appropriate Christmas present for a lady.

9.—*Chambers' Miscellany of Useful and Entertaining Knowledge*. Edited by WILLIAM CHAMBERS, Joint Editor of "Chambers' Edinburgh Journal." In ten duodecimo volumes. Boston: Gould, Kendall, & Lincoln.

The handsome American reprint of this work, in parts, has been brought to a close, and we now have before us the complete series, in ten beautifully bound volumes. It should be stated in this place, that the Boston edition is a perfect *fac simile* of that published in Edinburgh. The original design of the Miscellany was, (we quote from the editor,) "to supply the increasing demand for useful, instructive, and entertaining reading, and to bring all the aids of literature to bear on the cultivation of the feelings and understanding of the people—to impress correct views on important moral and social questions—suppress every species of strife and savagery—cheer the lagging and desponding by the relation of tales drawn from the imagination of popular writers—revive the fancy by descriptions of interesting foreign scenes—give zest to every day occupations by ballad and lyrical poetry—in short, to furnish an unobtrusive friend and guide, a lively fireside companion, as far as that object can be attained through the instrumentality of books." We do not hesitate to say, after a careful examination of every volume, that the pledge indicated in the design has been fully redeemed. The liberal, enlightened, and philanthropic views of the editor will be a sufficient guaranty, to those who know anything of the literary labors of Robert Chambers, that the work is free from narrow, sectarian, or partisan dogmas and sentiments; and that it contains nothing that any pure, right-minded person can on the whole find it in his heart to condemn. As a collection of well-written biographies, tales, poems and essays on important practical, every day affairs, it is the best for popular reading that we have ever met with. The seriously grave and the innocently gay—the young and the old, will here find in the dishing, a plentiful, well-spread board, that will satisfy their varied tastes, without palliating the appetite for wholesome nutriment. If the head of a family of sons and daughters, without any other book than the Bible in possession, should ask our advice as to the best appropriation of a small sum for books, (say six dollars, the price of this collection,) we should say at once, invest it in the ten volumes of Chambers' Miscellany.

10.—*The American Female Poets: with Biographical and Critical Notices*. By CAROLINE MAY. 8vo., pp. 532. Philadelphia: Lindsay & Blakiston.

11.—*The British Female Poets: with Biographical and Critical Notices*. By GEORGE W. BETHUNE. 8vo., pp. 490. Philadelphia: Lindsay & Blakiston.

These volumes are among the most beautiful specimens of the highly cultivated state of the arts in our own country, as regards the texture of the paper, the distinctness of the typography, and the richness of the binding, that we have recently seen. The first named volume, prepared by Miss May, contains brief biographical sketches of seventy-three of the female poets of America, with copious selections from their writings, either such as the compiler or the writers deemed the best or most successful displays of poetic inspiration and power. The earliest poetess introduced is Ann Bradstreet, wife of Simon Bradstreet, governor of Massachusetts colony, born in 1612. The selections are made with taste and discrimination, and furnish very fair specimens of the genius of our countrywomen. The volume is embellished with a beautiful mezzotint of Frances S. Osgood, and another, the "Poet's Home."

"The British Female Poets" of the Rev. Dr. Bethune, a gentleman of fine taste, embraces comprehensive biographical notices of sixty female poets, commencing with Juliana Berners, who flourished in the 14th century, and closing with Elizabeth B. Barrett. In the selection of the pieces, the first object of the compiler has been to give fair examples of each writer's peculiar characteristics; and, where the rule could be followed without too great loss, put aside those which are more frequently met with, for pieces of equal merit, less familiar to the reader. Two more beautiful gift books for this, and all seasons could scarcely be selected; and we are pleased to learn that the enterprise and liberality of the publishers is duly appreciated by the patrons of polite literature.

12.—*Horæ Pauline; or, the Truth of the Scripture History of St. Paul Evinc'd*. By WILLIAM PALEY, D. D., Archdeacon of Carlisle. 12mo., pp. 260. New York: Robert Carter & Brothers.

This is the first edition of a work, considered by some as Paley's ablest production, that has been re-produced in this country distinct from his entire works. Let no one suppose, from its Latin title, that it is too scholarly to be understood by the unlettered reader; on the contrary, the unlearned Christian may read it with edification; for, like everything from the clear head of its author, it is as lucid, and as easy of being comprehended, as any of the sublimely simple precepts of Christianity.

- 13.—*Poems*. By JOHN G. WHITTIER. Illustrated by H. BILLINGS. 8vo., pp. 384. Boston: Benjamin B. Mussey & Co.

Whittier is in our judgment, *par excellence*, the Poet of Freedom, and his muse is consecrated to Liberty in its purest and largest sense. In his own strong and truthful "Proem," (the only preface to this volume,)

" * * * here at least an earnest sense
Of human right and weal is shown;
A hate of tyranny intense,
And hearty in its vehemence,
As if my brother's pain and sorrow were my own."

In noticing this collection of his poems, Bryant, whose taste and judgment no one will presume to question, says:—"The works of Whittier, though he is of the denomination of Friends, have something martial in their music; they often stir the blood like the sound of a trumpet. They summon men, however, not to contests of force, but to combats of opinion. The vehemence and energy of his language in poems which have this object, has made them exceedingly and deservedly popular with a large class of readers. The poet has his gentler moods also, in which he puts forth scarcely less power." There are *now* true hearts and pure minds who will appreciate the liberty stirring strains of Whittier's inspired verse; but another age, looking back upon the oppressions of our own time, will render to him the worship that justly belongs to his prophecy of good, in that better age, the fruition of which will cheer their onward progress in the paths of "liberty, light, and love divine." Although Whittier could well afford to dispense with the pencil and the graver of the artist, we heartily welcome his imperishable works "in the fair page, and the clear and brilliant type which his publisher has given him, interspersed with, here and there, an effort of the artist to make the imagery, which the poet presents to the mind, visible to the eye." The best publications of the Boston press surpass, in material beauty, those of any other section of the United States; and we have no hesitation in saying that the present volume is without a rival, either there or elsewhere. As a New Year's gift-book, we should select it in preference to either of the many beautiful annuals produced this season.

- 14.—*The Eolian*. By DAVID BATES. 12mo., pp. 210. Philadelphia: Lindsay & Blakiston.

Mr. Bates, whose name appears on the title-page of this volume, although not among "Griswold's Poets of America," has written enough certainly to claim a niche in that Temple of Fame; and we will say more, many of his pieces possess merit, and if not equal to the best in the collection, will compare favorably with several that we could name, and that, too, without meaning to disparage any of the parties. Mr. Bates has certainly "caught some strains that came, Eolian-like, with those impulsive breathings in the heart," and sung them in smooth verse and appropriate words. His design, as he tells in his "Proem," is to touch the heart, "and make it throb

" With warmer feelings towards the human race,
Or kindle in the mind one holier thought,
Or fix one purpose stronger in the sight,
Or soothe one sorrow, lull one fear of pain," &c.

A better object it would be difficult to propose, and we have no doubt but that he will have accomplished in some good degree his laudable aspirations.

- 15.—*The Young People's Journal of Science, Literature, and Art*. Professor NATHAN BRITAIN, A. M., and Mrs. FRANCIS H. GREEN, Editors. New York: S. B. Britain.

"It is the design of this new periodical to cover a broad and general want of the age, by combining the gems of Science with the flowers of Literature and the curiosities of Art in such an attractive form as will tend to develop and perfect not only the Reason but the Taste, by investing truth with all her native charms, to which Fancy is but the subsidiary aid and ornament." The design thus stated by the editors has in our judgment, in the two or three numbers already issued, been carried out with remarkable fidelity. Its pages are filled from month to month with the productions of as choice a group of writers as were ever combined in the great work of educating the human mind, or enlarging its capacities for the reception of "the Good, the Beautiful, and the True" in Nature and Art. Although designated the "Young People's Journal," it contains matter that will gratify and instruct the more matured mind of man. It is published monthly in the magazine form, at a price (\$1 per annum) that places it within the reach of almost every family in the country.

—*Essays and Reviews*. By EDWIN P. WHIPPLE. 2 vols. 12mo., pp. 730. New York: D. Appleton & Co.

These two volumes afford a striking example of what an earnest mind can accomplish amidst the labor and toil of a business life. The honors of Old Harvard, recently conferred on this "self-made man," the author of these papers, were never more worthily bestowed. The collection consists chiefly of essays, reviews, and criticisms, selected from Mr. Whipple's contributions to the *North American Review*, and other leading periodicals. It embraces a wide range of subjects, including poetry, history, biography, and general erature; subjects which the writer seems to have studied with care, as he has certainly scanned with more than ordinary ability. His criticisms display nice discrimination, a cultivated taste, and matured judgment. His style is free from the blemishes of a servile imitation of "model writers;" neither copied from, or confined to, the rules of Addison, Burke, or Blair. Words are used, not for a mere display of rhetoric, but to convey in appropriate language the manly thoughts and matured views of the writer. Without any eccentricities, the style of Mr. Whipple possesses an individuality, that most sensible well-informed men will appreciate; and we consider it no faint praise to say that it is his own, so much so as that of any writer we are acquainted with.

7.—*Action on the Circle of Life. A Collection of Thoughts and Observations, designed to delineate Life, Man, and the World*. Pp. 384. New York: D. Appleton & Co.

This collection of thoughts and maxims, we are told by the author, and every page illustrates the statement, is the result of reading and meditation, as well as of many observations made upon mankind and society, in various parts of the world. The author, it would seem, had travelled in Europe, Asia, and Africa, and resided in New Orleans and New York; and in all the different countries and cities has observed much and thought sore, furnishing us in the present volume with the result of his investigations. Instead, however, of descriptions and details, he gives us his view of the philosophy of things. The volume is replete with valuable suggestions, many of which will "chime in with the experience of others." It is, in brief, a sort of Cyclopaedia of thoughts, observations, and maxims, covering a wide range of subjects, all more or less connected with life, man, and society, designed to "add something to the common stock of life and worldly knowledge."

8.—*Cyclopaedia of Moral and Religious Anecdotes: a Collection of several thousand Facts, Incidents, Narratives, Examples, and Testimonies, embracing the best of the kind in most former Collections, and some hundreds in addition, original and selected. The whole arranged and classified on a new plan, with copious Topical and Scriptural Indexes*. By Rev. K. ARVING, A. M., Pastor of the Providence Church. New York: Leavitt, Trow, & Co.

This is probably the most extensive collection of moral and religious anecdotes that has ever been made, or at least embodied in a single volume. It covers about nine hundred large octavo pages, including some five hundred anecdotes, &c. The arrangement alphabetically, by subjects, renders it very convenient for ready reference. An anecdote, pertinently used, is often more effective in producing a desired influence, than a labored discourse, however able or eloquent. Indeed, the moralist and Christian minister frequently find the illustrations they draw from such a source the most effective weapon in combatting error or producing conviction in the minds of their hearers. The work is highly commended by that portion of the clergy of different sects denominated "Evangelical" and "Orthodox;" and even those who are popularly considered "liberal" or "heterodox" will find much in it to approve and commend. The discriminating mind will be able to sift the wheat from the chaff, and derive amusement and instruction from the labor and research of the worthy editor.

19.—*Life of Charlotte Elizabeth, as contained in her Personal Recollections, with Explanatory Notes; and a Memoir, embracing the period from the close of Personal Recollections to her Death*. By L. H. TONNA. Pp. 359. New York: M. W. Dodd.

The "personal recollections" of Charlotte Elizabeth are perhaps the most interesting of her voluminous writings; as, in her own energetic style, she gives us "the outpourings of her personal experience during a long period of time, both mental and physical." In addition to the autobiography, which is brought down to 1840, six years prior to her death, we have, from the pen of her husband, a concise sketch of leading occurrences, and the literary labors that engrossed her time and strength to the latest period of her life, which terminated on the 12th of July, 1846. She was a most cordial hater of the Roman Catholic Church, but her benevolent heart deeply sympathized with the wrongs and woes of its poor Irish communicants; and her stirring appeals in behalf of the Irish peasant, as well as English operative, to the British government, have not been entirely unheeded.

- 20.—*Fairy Tales and Legends of many Nations. Selected, newly told, and translated* By C. B. BURKHARDT. Illustrated by W. WALKUTT and J. H. CAFFERTY. 18mo, pp. 277. New York: Baker & Scribner.

Mrs. Emma C. Embury relates an anecdote of a little girl, whose first question, when presented with a book, would be, "Is it true?" If not, she would ask, "Is it a fairy tale?" And if it was neither the one nor the other, all her fondness for reading could not induce her to accept it. The reason she assigned for this apparent inconsistency was significant of the truthfulness which is her prevailing trait. "I don't like books that *pretend* to be true—give me either histories or fairy tales." This volume would suit that little girl, as it contains as fine a collection of fairy tales as we have ever seen in print, selected from many nations and all ages by Mr. Burkhardt, with a taste and discrimination creditable to that gentleman's scholarly attainments and practical good sense. Indeed, we have read several of them, and have no hesitation in saying that they will be read with interest by old as well as young; and we will add, "the language and moral of which are in all cases unexceptionable."

- 21.—*The French Revolutions from 1789 to 1848.* By T. W. REDHEAD. Vol. I. 12mo, pp. 320. Boston: Gould, Kendall, & Lincoln.

The design of this history is to present, in one complete and homogeneous narrative, the strange vicissitudes that mark the momentous era from 1789 to 1848, an interval of sixty years, pregnant with yet unseen consequences; and from the traced concatenation of causes and effects throughout its entire course, exhibits an accurate perception of the Revolution, or, more properly, series of revolutions. Consulting all the original sources of information, which lie scattered in voluminous collections, the author affirms that he has endeavored to render "it impartial, demonstrative, and exact." The first volume commences with the social and political condition of France from 1774 to 1789, and carries the history down to the close of 1793; a second will, we presume, complete the history from that period to 1848, including the revolutions of 1830 and 1848. It is a reprint of "Chambers' People's Edition," a fact that will recommend the work to all who are acquainted with the liberal and enlightened views of the Scottish publishers.

- 22.—*The Boy's Spring, Summer, Autumn, and Winter Book.* By THOMAS MILLER, Author of the "Beauties of the Country," "Rural Sketches," etc. New York: Harper & Brothers.

This beautiful volume includes in its scope the innocent and healthful sports that naturally interest boys during the four seasons of the year; it also describes the appearances of nature in all its diversified changes, happily blending useful knowledge and agreeable instruction with country rambles, boyish games, and rural tales. Though written purposely for boys, and those who have to do with them, men of all ages will be delighted to make themselves boys again for a time for the sake of reading it. The pictorial illustrations, one hundred and thirteen in number, are at once appropriate and beautiful.

- 23.—*Treasury of Knowledge. In Three Parts. I. Elementary Lessons on Common Things. II. Practical Lessons on Common Objects. III. Introduction to the Sciences.* By W. & R. CHAMBERS. Enlarged and Improved. By D. M. REESE, M. D., LL. D. New York: A. S. Barnes & Co.

The "Educational Course" of the Messrs. Chambers, of Edinburgh, has, we learn, been adopted in preference to any other series extant for republication in the United States, because of its merited popularity in the schools of Great Britain, where its practical utility has been proved by the test of experience. The present volume, which may be considered the first of Chambers' Educational Course, inasmuch as it seems to give the outlines of all knowledge, is designed for an early reading book, to be placed in the hands of children as soon after they learn to read as practicable. We have often thought that works of this class were preferable, as reading books, to a mere collection of didactic essays and poems, which do little more than instruct the young beginner in the art of reading "the English language with propriety," to the neglect of storing the mind with useful knowledge.

- 24.—*Elements of Natural Philosophy. Chambers' Educational Course, enlarged and improved.* By D. M. REESE, M. D., LL. D. New York: A. S. Barnes & Co.

This work is divided into three parts, viz: 1. Laws of Matter and Motion; 2. Mechanics; 3. Hydrostatics, Hydraulics, and Pneumatics. The clear and concise method adopted by the author or compiler of this work, renders it all that it purports to be—the first book of Natural Philosophy. The improvements and additions made to it by the American editor impart a value to it that teachers in the United States will know how to appreciate.

5.—*Boston Notions; being an Authentic and Concise Account of "That Village," from 1630 to 1847.* By NATHANIEL DEARBORN, author of the "American First Book for Letters," &c. Boston: Printed by Nathaniel Dearborn.

Mr. Dearborn is an old and highly respectable resident of "that village." Thirty-four years ago he issued proposals for publishing a similar work, under the title of a "Picture of Boston," but was overpersuaded, and for sufficient reasons the undertaking was given up. The plan it would seem, however, was never abandoned, and the changes that have taken place since that time have only added to Mr. Dearborn's stores of information, and enable him at this time to collect a large mass of interesting items concerning the earliest days of the settlement of that peninsula, which have been continued to the present time. These items and facts, including historical sketches of the rise and progress of Boston, its men and things, include a mass of information that it would be difficult to obtain in any other form. The work contains a number of engravings appropriately illustrating the text, and altogether reflects great credit on the skill and industry of the worthy compiler.

26.—*Errors of Physicians and others in the Practice of the Water Cure as a Remedial Agent in the Prevention and Cure of Diseases. With Instructions for its Proper Application.* By J. H. RAUSSE, Practitioner of the Water Cure in Mechlenburgh, Germany. Translated by Dr. C. H. MEEKER, Member of the Scientific Hydropathic Society of Germany. 12mo., pp. 91. New York: Fowlers & Wells.

Our faith in the efficacy of the "Water Cure" as a system to prevent, if not to cure all or nearly all the diseases to which "flesh, blood, and nerves" are heir, grows stronger every day. This conviction rests upon our own, as well as upon the experience of our friends. We therefore rejoice in every new effort to diffuse more light on the subject, especially when, as in the present case, that light comes from a source as reliable as long and successful practice, experience, and intelligence can make it. The present treatise is chiefly intended to free the Water Cure from the misconceptions and misunderstandings under which it labors, and from which any radically new system must in its incipency labor; namely, that of falling into the hands of persons who are unacquainted with its principles, or unskillful in the practice of them, thus in many cases becoming productive of no benefit, and in rare instances of positive injury. No unprejudiced person can read this little manual without becoming strongly impressed with the soundness of the principles evolved, with a degree of force and clearness rarely to be found in medical works.

27.—*The American Phrenological Journal and Miscellany.* Vol. X. O. S. FOWLER, Editor. 8vo., pp. 392. New York: Fowlers & Wells.

The December number completed the tenth annual volume of this interesting work. Its history may be regarded as indicative of the progress of the science in our own country. At its start in 1838, and for one or two years, the patronage extended to the enterprise was anything but encouraging to the Brothers Fowler, who may be regarded as the apostles, if not the pioneers, of the "Phrenological Church in America." But, within the last eight or nine years, its circulation has widened, and every new year added to the momentum of its increase, so that its readers may with truth be numbered by tens of thousands. The light it has diffused over our land, and the influence it has exerted on society through many channels, is beyond human computation. Its teachings have made wiser and better many of the purest and most gifted of the human race in America. Heaven speed its noble mission, and long live its philanthropic teachers; who are doing a work second in importance only to that accomplished by the Author and Finisher of the Christian Faith.

28.—*War with the Saints. Count Raymond of Toulouse, and the Crusade against the Albigenses, under Pope Innocent III.* By CHARLOTTE ELIZABETH. 18mo., pp. 305. New York: M. W. Dodd.

The present volume, the last, we are told, that proceeded from the pen of Charlotte Elizabeth, was written under circumstances of the most painful character during the last eighteen months of her life. She depicts, in glowing colors, the persecutions of the Albigenses, and every page displays the same vigorous style that characterized all her previous writings.

29.—*Natural Philosophy, for the Use of Schools and Academies; illustrated by numerous Examples and appropriate Diagrams.* By HAMILTON L. SMITH. New York: J. C. Riker.

This volume, we are informed, is in many respects dissimilar to the text-books of a like class which have preceded it. We have not space or time to point out the differences; but we may recommend an examination of the work by teachers and school committees, as one likely to suggest valuable improvements in teaching Natural Philosophy.

- 30.—*Sermons on Christian Communion, designed to promote the growth of the Religious Affections, by Living Ministers.* Edited by T. R. SULLIVAN. 12mo., pp. 391. Boston: Wm. Crosby & H. P. Nichols.

This work contains thirty-one sermons, from as many living divines of the Unitarian Church in the United States, confined for the most part to Massachusetts and the New England States, where that form of Christianity seems to have had its origin, so far as this country is concerned. The clergy of this denomination, generally graduates of Harvard University, form a body of as-intellectual and highly educated men as are to be found in any sect of Christendom; and in no denomination, perhaps, are to be found so many chaste, scholarly, and beautiful writers. As evidence of this, we need only refer to the Channings, the Wares, to Greenwood, to Kirkland, to Palfrey, to Dewey, to Pierpont, and to Parker, and, indeed, to the authors of the sermons embraced in the present collection. The design of this publication is, to heighten the interest in the communion, although not confined to the special claims of that institution. Indeed, "its plan, like its name, includes sermons addressed to the religious sensibilities;" and, "in conformity with this, the real though not formal arrangement of the contents makes a series of practical discourses of the persuasive kind, relating to repentance, or the duty of beginning the Christian course to edification, or the encouragements to progressive Christian improvement, and to the Eucharistic service, as affording exercise for all the grateful and devout affections of the heart in every stage of its subjection to Christian discipline;" and finally, "to dispose men to more Christian methods of living."

- 31.—*Baptism, with reference to its Import and Modes.* By EDWARD BEECHER, D. D. 12mo., pp. 342. New York: John Wiley.

The editor of a commercial journal can scarcely be expected to decide on the merits of a theological work; but we can say, from a very cursory glance at a page here and there, that it bears the impress of the learned scholar, and the able and ingenious controversialist. The author's reasons for engaging in the discussion of the subject of baptism are, that it is a point in which all Christians are not yet agreed, and therefore all truth is not seen; that "God has not of design hidden the truth, or revealed it doubtfully on a point which has proved to be of such magnitude by its practical results." He believes that when all truth is seen on this subject, which may be seen, all true Christians will so far agree that no obstacle to their perfect union in feeling and action will remain. The work we should think rather designed for theological students than for practical every-day Christians.

- 32.—*The Works of Washington Irving.* New Edition, revised. Vol. II. *Bracebridge Hall.* New York: George P. Putnam.

Uniform with the "Sketch Book" and "Knickerbocker's New York," already published, we now have "Bracebridge Hall, or the Humorists, a Medley by Geoffrey Crayon, Gent.," the author's revised edition of a work which those who have read before would scarcely suppose needed revising. We are gratified to learn that the enterprise of Mr. Putnam is eminently successful; and we cannot too heartily commend the beautiful style in which he has produced this new and revised edition of our most popular American author.

- 33.—*Cousin Bertha's Stories.* By MRS. M. N. McDONALD, author of "Fanny Herbert."
34.—*Always Happy! or Anecdotes of Felix and his Sister Serena.* Written for her Children. By a MOTHER.

Both of these books were written by mothers for their children; the first named by an American lady, and the last by an English woman. They are interesting and instructive; and that their influence must be good, may be inferred from the relationship that exists between the true mother and her much-loved offspring.

- 35.—*Hogarth: his Life and Works.* 4to. New York: J. S. Redfield.

Besides a well written memoir of the inimitable Hogarth, the great moral artist, the work is profusely illustrated with copies of his most celebrated paintings, embracing, among others, the Rake's Progress, the Idle Apprentice, Gin Lane, Beer Street, the Election, the Politician, the Cockpit, the Laughing Audience, etc., etc. They have the appearance of being very clever copies of the originals, which hold a rank among their class altogether unrivalled. The letter-press fully illustrates each painting of the artist.

- 36.—*Mary Barton, a Tale of Manchester Life.* Harpers' Library of Select Novels.

This story is designed to reconcile the differences that exist between the manufacturers of Manchester and those whose fortunes their operatives have helped to build up.

THE MERCHANTS' MAGAZINE,

Established July, 1839,

BY FREEMAN HUNT, EDITOR AND PROPRIETOR.

VOLUME XX.

FEBRUARY, 1849.

NUMBER II.

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HUNT'S

MERCHANTS' MAGAZINE

AND

COMMERCIAL REVIEW.

FEBRUARY, 1849.

ART. I.—SURVEY OF THE COAST OF THE UNITED STATES.

It is a singular fact in the history of our institutions, that whenever scientific projects have been recommended or entertained by the government, they have constantly been resisted by Congress, at least by the popular branch of it; that the appropriations for such purposes have always been granted with reluctance, and their aims and uses discussed with suspicion and disfavor. Nor has the effect of such conduct on the part of Congress been less uniform than its cause; for, as certainly as such establishments have once been formed and got footing, so certainly, notwithstanding the continued resistance of the Representatives, have they grown and magnified themselves, until by their own influence, connections and patronage, they have not only secured their existence, but been able to defy all opposition. In regard to such institutions, *c'est le premier pas qui coute*—once begun and there is no fear of their future destiny. This state of things has resulted mainly from the jealousy which the legislature always entertain of executive usurpation, and which has compelled the latter to advance projects both honorable, necessary, and of public utility, under covert and feigned pretences. The first organization of such projects has therefore been defective, inasmuch as it has generally been both inapplicable and inadequate, and the original evil has been augmented and perpetuated by the unavailing opposition of Congress.

As examples of the truth of what has been stated, we may refer to the Military Academy and the Coast Survey, with its not less important and expensive accompaniment of Weights and Measures.

The first of these institutions was originally a voluntary association of officers of the army for scientific improvement, commenced in 1802, under the patronage and direction of General Williams, then Chief of the Corps of Engineers. It has gradually attained its present rank and usefulness, but has not been the less an example of the truth of our remark, as to legislative opposition. Its origin was obliged to be masked as a private

military association, not deriving any support from the government. For several years its appropriations were trifling and covert, and subsequently it has more than once been a subject of legislative censure, and the funds necessary for its support been in no little jeopardy.

The other scientific work to which we have alluded (the Coast Survey) escaped notice for several years, owing to the time necessarily spent in preparation and procuring instruments; to the excitement of the war, in which the country was then engaged; and to the state of public knowledge then existing upon such subjects.* At that time the word "survey" conveyed the notion of a temporary and limited operation; and the general idea then might have been, and probably was, that the coast of the United States could be surveyed for all practical purposes, in the same time, and in much the same manner, as Landers' exploration of Africa, or Ross, Wilkes, Parry, and Franklin's surveys of the Polar regions. As soon, however, as the survey of the coast came under the surveillance of the House of Representatives, it underwent a domiciliary visit, became the subject of unfavorable and mistaken animadversion, and was suspended within a year after actual operations had been commenced. After an interruption of fifteen years it was recommenced in 1832, under the patronage of that President whose will, sometimes following, and sometimes coercing public opinion, has left so many traces among the affairs of the time. Since then, the Coast Survey has undergone a scrutiny by the House of Representatives, has once had its appropriations refused, and has maintained its position only by dint of personal influence and exertion.

Of the first of these national institutions it is not now our intention to speak. It does not fall properly within the line of our publication, the subjects of which are more especially commercial. No charge or insinuation has as yet been ever brought against it for lack of proper or economical management. We believe it to be essentially necessary to the culture and reputation of the country, and heartily wish it continued success.

In regard to the other, the case is entirely different. Although its proper execution require high knowledge of the principles of science and of practical methods, with which we do not possess an extensive or intimate acquaintance, yet its purposes and results are decidedly commercial, and are fairly connected with the interests of the portion of the community who are our patrons; and we propose in the present paper to take some notice of the work in an economical point of view, in regard to its expense, its management, and its results. Until recently, such a notice would have been premature. While the work was yet struggling for its existence, with small appropriations, a superintendent, who, though of high scientific character, was nevertheless a foreigner, and somewhat impracticable in his habits, it would have been found difficult to procure sufficient data upon which to form an unbiased opinion. Within the last four years, the case has become entirely different. The annual appro-

* The language used in the different public documents of this period, sufficiently indicate the views of the government. To survey "*the coast with the adjacent shoals and soundings*," (Act of 1807,) "*and shall be deemed to provide for the survey of the coasts of Florida*," (Act of 1832.) This last provision of the Congress of 1832, in regard to the coast of Florida, seems nonsense now, when without either notice or authority, a party of the Coast Survey has been dispatched to California, before any other act of sovereignty had been exercised by the government.

tion growing regularly, year by year, is now more than eight times original amount, making, with the increase derived from the Navy Department, and the Revenue Bureau of the Treasury Department, a sum of near \$300,000. In this case, with a fleet of sixteen sail, a *sonnel* greater than either of the staff corps of the army, and the superintendence in the hands of a person, whose connections are amongst the most influential of the nation, it seems the duty of some one journalist to give the public notice of a work in which malversations may be so easily seen from observation, and the proper execution of which affects so deeply the interests of commerce and the country. It is, perhaps, therefore necessary to present such a notice now, not only because some attempts at an investigation of the concerns of the Survey, made during the last session of Congress, seem to have been put down in a way which indicated the exertion of official and personal influence, and because, so far as the press has as yet been concerned, the notices have assumed so decidedly the character which is usually denominated puffing, to indicate very certainly from what source they have emanated.*

We shall endeavor to make this notice as brief as possible, relying mainly, if not wholly, upon the *printed* documents of the Survey, or such other public information as may at least easily be submitted to inspection and reference.

The law authorizing the survey of the coast was passed February 10th, 1807. The words indicate distinctly that it was intended chiefly for maritime purposes, and those of defence; and that a geodetic operation, which was commenced under its authority, had not been contemplated or understood by the government.

The law appropriated \$50,000 for the Survey, which is to be executed under the direction of the President. Nothing was done under this authority till May, 1811, when Professor Hassler was sent to England to procure the necessary instruments. They were made principally in England, under his own direction, and he returned with them to this country in October, 1815.

Such fault seems to have been found with Mr. Hassler, on account of the time spent on this mission; but when we consider the state of the world at that time, engaged as it then was in a general war, and that the manufacture of instruments, of the delicacy required in such operations, was then in its infancy, the time consumed does not appear unreasonable. The agent appears also from his correspondence to have been neglected, and left unfurnished of means, producing considerable delay and increased expense. The whole expense incurred in procuring the instruments amounted to \$37,549.

After a good deal of preliminary discussion, and some delay in waiting for the appropriation, Mr. Hassler was appointed in May, 1816, to superintend the Survey. The rest of that year was spent in organizing and equipping, so that active operations in the field did not commence till July, 1817. In that year a beginning was made in the neighborhood of

The most important of these notices are an article from the *Princeton Review*, for July, 1845, entitled the *Coast Survey*; another of the ensuing year from *Silliman's Journal*; and a third in the *American Almanac* for 1849. The first of these was written by Senator Henry, and the two last by Lieut. C. H. Davis, of the navy. The two first were issued in a pamphlet form, and circulated very extensively among members of Congress and others. We suppose it is intended to make the same disposition of the last.

New York, and much work done. A large surface of the most important part of the coast had been covered with primary and secondary triangles, pyrometrical experiments made for determining the expansion of the bars to be used in measuring the bases, two bases approximately measured, and a sufficient advance made in the work both to develop what might have been defective in its conception, and to suggest the proper remedy. But the work thus done was only preliminary, and showed no actual result to the country.

The superintendent had been busily engaged in laying the foundation of an extensive building, but the government expected a furnished house. In consequence, a bill was passed in April, 1818, prohibiting the employment in the Survey of other persons than officers of the army and navy, which at once deprived the superintendent of his position, and put an end to the work. This unfortunate conclusion, though it may be justly attributed to the misinformation of the Secretary of the Treasury, was nevertheless in great part due to other causes. The peace of 1815 had left large numbers of military engineers, whose corps had been much augmented during the preceding wars of the continent, without professional employment; and the governments to which they belonged, particularly that of France, with prudent foresight, instead of diminishing these establishments, directed their energies into a new channel, and employed them in works of public improvement. A French engineer officer of high rank had been engaged by the general government to project a system of fortifications on the coast and frontier, and several officers of inferior grade were employed upon the public works in New York and elsewhere. Under such circumstances, it was but natural that the officers of our own army and navy should look upon a work like the Coast Survey as their peculiar property, and endeavor to place themselves at its head; and there is no doubt that the suspension of the work at that day, was in a great measure due to the operation of such a feeling.

The law of 1818 authorized the employment of officers of the army and navy, and some detached surveys were made by them; but there was no general system. The works done were unconnected, executed by different persons and different methods, without any supervision, and, as may naturally be expected, at great expense, and to little purpose. The original project was lost sight of altogether, and the department having charge of it did not, in its annual report, deign a notice either of its existence or demise.

For a few years the superintendent was retained in the public employment as Astronomer, under the commission for fixing the boundary under the 5th article of the Treaty of Ghent; and though in straitened circumstances, continued to maintain a high character, both for science and integrity, throughout the country. In 1818 an account of pyrometrical experiments, made on the Bars of the Base apparatus, was published in the transactions of the American Philosophical Society without attracting much attention.* In 1825 there was published, through the same medium, "Papers on various subjects connected with the Coast Survey," which, though communicated in 1820, were not published till that year, and indeed would probably not have been published in these transactions at all,

* This volume, though bearing the date of 1818, was probably not published till a year or two afterwards.

had they not been asked for publication by another journal. These papers attracted immediate attention in Europe, as both the instruments and methods, though ten years had then elapsed since their construction and adaptation, were confessedly in advance of the science of the time. The *Bulletin des Sciences*, the *Revue Encyclopedique*, the *Astronomische Nachrichten*, immediately noticed, in terms of the highest commendation, the description of a work, which in our own country was published with much reluctance in the only scientific journal then in existence.

During the last years of Mr. Adams' administration, the attention of Congress had been directed to the great discrepancy existing among the standards of weights and measures in use throughout the country; and in the second year of the succeeding presidency, (May, 1830,) a resolution was passed directing an examination and comparison of the various measures then in use at the different custom-houses. This examination was entrusted to Mr. Hassler by the then Secretary of the Treasury, Mr. S. D. Ingham, of Pennsylvania.

Few of the statesmen of this or of other nations, have been men of attainments in science. Neither the education nor pursuits of such men lead them among material agencies, and when they have to deal with scientific subjects, the governing motive is generally a regard to their own popularity and aggrandizement. A secretary who had earned his position from a regard to economy and thrift, would be apt to strangle projects of this character by stinting their means; while a mere politician would put them more directly to the same use, as opportunities of exercising patronage and rewarding his adherents. When the project for reforming the standards originated, it was fortunate that the country had such a man as Mr. Ingham at the head of the Treasury Department. With more knowledge of science than usually falls to the lot of secretaries, he was nevertheless practical in all his views, and as a manufacturer and a man of business familiar with the wants and interests of the industrial and commercial classes. Had the examination been entrusted to an uninformed or empirical person, the results would have been unsatisfactory for ultimate determinations, and the standards might have remained in the same state as at first. The measures used, particularly those of the yard, bushel, and gallon, were gross and unequal, not entitled to, and scarce susceptible of, the nice comparisons to which they were subjected. Mr. Hassler, however, was aware of the importance of the subject, and the methods to be employed. There being no sufficiently accurate balances in the country, he had constructed here sets of hydrostatic balances, by which all delay in waiting for those of the ordinary construction was avoided, and determinations even more accurate were arrived at. The execution of this work brought him to Washington, where his skill, industry, and resources, fell more directly under the eye of the heads of government, and he was better able to explain what had actually been done in the unfortunately pretermitted survey of the coast. About this time, too, (or, indeed, several years before,)* the army, by whom, even according to the law of 1818, the survey of the coast might have been continued, began to fear lest one of their important privileges, that of conducting the survey, might not have become forfeited by *disuser*. The survey of the coast began again to be spoken of, its discontinuance

* Vide Col. Roberdeau's paper, read before the Columbian Institute December, 1836.

regretted. Mr. Ingham, while in office, and even after his retirement, continued to exert his influence in recommending it to public consideration; and Mr. Southard, Mr. Clay, and other distinguished persons, also lent their influence to recommence the work.

The detailed report of the examination of weights and measures, made in January, 1832, showed in a clear light, the science, skill, and resources of Mr. Hassler, as well as the injustice which the government had been guilty of towards him in 1818. Finally, the project of renewing the survey upon the original plan attracted the favorable notice of the President and Congress, and in July, 1832, a law was passed removing the restriction which had limited its execution to officers of the army and navy, and appropriating \$20,000 for the expenditure of that year. Mr. Hassler was appointed superintendent in August, 1832, and continued in the office till his death, in November, 1843.

It can easily be conceived, that a project, recommenced under such peculiar circumstances, must be embarrassed at its outset. The army or navy, or either of them, had been authorized, under the law of 1818, to continue the survey, and to have asked appropriations for such purposes, which would as certainly have been granted. They had, however, not done so. They neither recommended any new plan of operations, nor followed the one which had been already marked out, by the first superintendent; and when the work recommenced, they found themselves in a position, which a little foresight on their part might have made less unpleasant. They were obliged, for a time, at least, (and after a preparation of fourteen years,) to become subordinate, instead of leading; and the aspirations from this quarter were more than sufficient to disturb the atmosphere about the superintendent at the recommencement of his labors, and suffered no diminution during its continuance.

In September, 1832, Mr. Hassler commenced the survey with only two assistants, a lieutenant of infantry and a passed midshipman. The operations of this year were limited to finding and establishing signals at the points used in 1817. In the succeeding year he took the field with a larger party, but much delay was experienced in consequence of the necessity of bringing together and repairing the instruments of the collection of 1815, which had been used at different places, and by different persons. In the succeeding year a base was measured on Fire Island beach, and a naval party, under the command of Commander Gedney, added to the work. The *personnel* of the Survey went on increasing from year to year, as the organization improved and extended itself, till 1843, (the year of Mr. Hassler's death,) when there were employed twenty-seven civil assistants, and about eighteen officers of the navy, four vessels being then engaged in sounding.

During the period of Mr. Hassler's superintendence, the main triangulation had been carried from Point Judith to below Philadelphia, in the Delaware; and the secondary triangulation, commencing at the same point northward, and covering the sea-coast, as well as the shores of Long Island Sound and the Delaware, reached southward as far as Capes May and Henlopen, and to Annapolis in the Chesapeake.

A reconnaissance had also been made in North Carolina, and the site of a base been selected upon which to ground the work in that quarter.

Four sheets of the large map of New York Bay and harbor were fin-

ished, and the reduced sheets of New York Bay and Long Island were ready for the engraver, as well as the whole of Delaware Bay.*

The soundings of the outer coast had been carried far enough seaward for purposes of navigation, and the work was progressing in a manner both efficient and creditable. The weights and measures intended for the custom-houses had been completed, and preliminary steps taken to commence those intended for the States. A set of decimal ounce weights had been made for the Mint. Copies of the new standards, with a large balance of the most delicate construction, had been presented to the British government, in the hope of procuring copies of the new English standards in return; a hope which, however, has not yet been realized. The whole amount of appropriations for the Survey from its commencement being \$881,549, to which is to be added about \$287,000 for equipments and pay of the naval parties employed in sounding.†

During the whole of this period of eleven years, there seems to have arisen an uninterrupted series of misunderstandings between the different departments to whom the execution of the work was entrusted, and the Superintendent of the Survey. These misunderstandings gave rise to a vexatious correspondence, generally about matters of small moment, and almost always terminating in the department conceding the point which had occasioned the dispute. The general superintendence of the work, as concerning most intimately the commercial interests of the country, had originally been assigned to the Treasury Department; but within two years after its recommencement in 1832, it had been transferred to the Navy Department, and again at short notice sent back to the Treasury. These changes were doubtless made to avoid difficulties in the settlement of accounts, where the usages of one department having reference to a particular class of expenditure, may, in some cases, be more available than those of another. This expedient tended, however, rather to embarrass than to facilitate. No new branch of the public service can ever at once come fairly under general regulation as to its accounts, and it requires time to fix rules which will prevent fraud and abuses, without hampering and rendering inefficient the officers in their more important duties. Had the suspended accounts of the Survey been left subject to the decision of the Auditors and Comptrollers of the Treasury, the work would have been ended ere it had well begun.‡ At this time, as is the case in all

* Some slight change in the conformation of the shores near Sandy Hook were discovered, and the plates left by Mr. Hassler were altered accordingly. This occasioned a correspondence between the Chamber of Commerce of New York and the Superintendent of the Coast Survey, and made the name of the new superintendent necessary upon the sheets of the old work. At Sandy Hook, the shores within a certain limit are never two years precisely alike—Spermaceti Cove and Shrewsbury Bay alternately advancing and receding, and occasionally running into each other. It was an approximation of this kind that enabled Col. M'Lane, then of New Jersey, during the war of the Revolution, to give New York notice of the approach of a British fleet.

† Part of appropriation expended for instruments during the following years:—

1807.....	\$37,549	1835.....	\$30,000	1840.....	\$100,000
1818.....	24,000	1836.....	80,000	1841.....	100,000
1832.....	20,000	1837.....	60,000	1842.....	100,000
1833.....	20,000	1838.....	90,000	1843.....	100,000
1834.....	30,000	1839.....	90,000		

‡ The following is the opinion of one of the most talented officials of the Treasury in regard to purchases:—

“The passage relied upon to justify the purchase of horses, carriages, books, instru-

new services, there were many causes of difference between the disbursing and accounting officers. The superintendent's compensation became early a subject of discussion. It had originally been fixed at \$3,000 per annum of salary, and \$1,500 for personal expenses, including subsistence, travelling, and postage.* An additional allowance of \$1,500 was made with great reluctance, when the superintendent became charged with the construction of the new standards. Another matter producing difficulty, was the necessity of procuring new instruments, for which specific authority was necessary from the department. The instruments of the collection of 1815, which had survived the intermission of seventeen years, from that time to the recommencement of the Survey in 1832, were found insufficient when the work extended itself, and others were required. Explanations were asked and made, and sometimes not understood; and so strict were the rules adopted, that an almanac or a thermometer could scarce be purchased without an authorization.

The first vessel used for the sounding parties, instead of being furnished by the Treasury Department, was charged, with all its equipments, to the appropriation for the Survey, and that too at a time when that appropriation for the year amounted only to \$20,000, presenting a singular contrast with the conduct of the same department now, where vessels and equipages, constructed and hired for another branch of the public service, amounting to at least \$240,000, have been transferred to the use of the Coast Survey without even a passing remark. Under the superintendence of Mr. Hassler the case was entirely different. The Department, the Superintendent, and the Legislature, seem to have been at continual variance, though the appropriation was not then half of what it is now, and at least as much work was done in every year as there has ever been done since. In 1842, so much discontent was manifested by the public at this continued bickering, that the House of Representatives appointed a committee to investigate the whole subject. This committee made a partial report through one of its members, accompanied with sundry recommendations, which was, however, never acted upon. In the succeeding year the appropriation was at first refused, and only granted upon condition that it should be expended in conformity with a plan to be submitted to the President by a board of officers who were designated for the purpose. This board met soon after, and reported a plan, which (except a few unimportant alterations, attended to only for the succeeding year) left the matter very much where it was.

It was evident that this lack of co-operation between the Department and the Superintendent, as well as the misunderstanding and opposition of Congress, did not proceed so much from any opinion that the work had been in any way mismanaged, as from the intrigues and ill offices of ex-

ments, &c., is found in the letter of the Secretary of the Treasury, dated 3d August, 1816, and is in the words following, viz:—"You will be provided with competent assistants of officers and men from the corps of engineers and from the navy, with tents and field equipages, wagons and horses, &c." This clause, it would seem evident, does not authorize the purchase of anything. Mr. Hassler is to be provided, he is not to purchase or provide himself."—*Letter of the 4th Auditor, Oct., 1834.* Under the present regulation, the approval of the Superintendent of the Survey is all that is required to pass any account.

* The salary of the present superintendent is \$7,500, vide official register. This was contradicted last winter, but an investigation, it is believed, will sustain the authority of the Blue Book.

jectants, who had been disappointed, or aspirants for whom there was not room. The continued turmoil and disturbance which had beset the superintendent from the commencement of his duties, acting upon a temperament naturally mercurial and sensitive, had gradually undermined his health; and in November, 1843, in consequence of exposure in the field, he died suddenly, in the seventy-third year of his age, leaving vacant a situation, which, when he first received it, he was perhaps the only man in the country fully competent to fill.

As might have been expected, on the occurrence of so important a vacancy, there were a large number of applicants for the succession.

The assistants in the Survey, some of whom had been thirty years in the public service, were overlooked and rated merely as clerks, a race of functionaries who have been held from time immemorial as disqualified for any further advancement, and are merely continued in office as marks of reference, and living *indicia* of the acts of the succession of chiefs under whom they have served. The successful candidate, or the one who produced the greatest amount of personal influence, was Professor Bache, the present superintendent, who had been for several years the president of the then inchoate Girard College, and at that time occupied the chair of Natural Philosophy and Chemistry in the University of Pennsylvania. Doctor Bache was then known as a clever lecturer, but out of Philadelphia, his scientific reputation depended mainly, if not altogether, upon his preface to Brewster's Optics, an avowed compilation from works on the same subject of more distinguished authors, and a Report on Education, made to the trustees of the Girard College, which was published by them with reluctance, and of which it may be said, that if the details were gathered with great expense and labor during a long visit to Europe, the maxims inferred might as well have been taken from the Parent's Assistant. But what might be deficient in reputation and skill, was more than made up by influence.

The new superintendent, immediately on assuming his position, made several important changes among the *personnel* of the Survey, the final result of which had then probably been calculated or foreseen only by himself. The regulation submitted by the board for reorganizing the Survey only a year before, which directed a monthly return of operations in the field, was dispensed with altogether, and in its stead a return was directed to be made to the superintendent, resembling very much the monthly returns from primary schools, the uses of which were not developed until some time after. Assistants, who had but a few months before been appointed by the department to perform certain duties, were assigned to employments with which they were less familiar. These changes, as the results manifested soon after, could have been made with no other intent than to excite discontent and dissatisfaction, and occasion some action or remark, which, being reported to the department as insubordinate, might give pretence for a removal, and make room for an adherent. We refrain from saying much on this subject, out of feelings of delicacy to those concerned, and trusting that an investigation may be had before long, which will give the public some insight into this part of the subject.

Soon after this, a permission given by the department to have calculations made by persons not belonging to the Survey, and engaged in other employments, which permission was not spoken of till the year afterwards, allowed the superintendent to increase to almost any extent his official

patronage, without making any exhibit either of the names or functions of the auxiliaries.* But a regulation of still greater importance, and which cleared the way at once for disbursements of any description, is described page 44 of the Report of 1845:—"The disbursements of each party are made by the chief, and the accounts then pass into the hands of a general disbursing agent, by whom they are first audited under the regulations of the Treasury Department. They then undergo an administrative examination by the superintendent, and if they have passed these two audits, are forwarded by the general disbursing agent to the First Auditor of the Treasury." This regulation made the Coast Survey at once a bureau of the Treasury Department, the method of audit being precisely the same as that of any other bureau. While under the former superintendent, even the smallest purchases were objected to, unless made by permission of the department; this effectually removed every obstruction, and relieved the auditor entirely from the discussion of a very complicated budget of accounts. The lodgment thus made was speedily fortified, and in the official register next issued, the Superintendent of the Coast Survey figures above all the auditors, as the officer of third rank in the department;† giving thus a very incontrovertible evidence that the Coast Survey has now no fear of opposition, and is destined to become a permanent establishment. Indeed, its parties, without any authority but that of the department, and leaving seven-eighths of the older settled and more dangerous coasts untouched, have already been sent to the countries only acquired or conquered during the last year, and are triangulating in Mexico and California—"On ne arrête pas dans un si beau chemin."‡ Congress may debate upon the propriety of legislating for their new territories, or providing them with governments, but to the operations of the Coast Survey there is neither obstacle nor end.

In taking the field in 1844, the superintendent assumed the northern portion of the Survey, which had been carried to Point Judith by his predecessor, under the immediate charge of one of the principal assistants. The accuracy of the work thus far had been verified by the last line of the triangulation, agreeing, within a very small limit, (a fraction of a foot,) with the same line of Mr. Borden's triangulation, made for the survey of Massachusetts, and depending on another base.§ In taking this part of the field, instead of leaving it to the assistant, who had so honorably and judiciously managed the preceding and more difficult part of the operation, the superintendent not only secured himself an easy and healthy country to operate in, but he had before him the points already established by Mr. Borden, each marked with a monument. He had also Mr. Bor-

* An example of the extreme rapidity with which computation is done under the present superintendence, it may be stated that the recomputation of the base of 1844, first computed by the assistants in the field, while the work was doing, have only been recomputed in 1847.—Page 48, Report of 1847.

† It may be said of this as of the superintendent's salary, that it is a mistake of the Blue Book. That book never errs on that side.

‡ The coast of California is now more accurately surveyed than any of our own coast, except what has been covered by the Coast Survey, about one-eighth of the whole, counting from Passamaquoddy to the mouth of the Rio Grande.

§ This close agreement of Mr. Blunt's with Mr. Borden's work is nowhere spoken of in the Coast Survey reports; nor is there a single atom of credit given to Mr. Borden, though it is said that he was one of the applicants for the superintendence, and withdrew his claim in Dr. Bache's favor.

den's results to compare always with such as he might derive himself; and moreover, he had with him one of Mr. Borden's assistants, who knew the country, and thus spared him any trouble of reconnaissance. Indeed, it is known that an attempt made by this assistant to change a principal line of Borden's triangulation, though made at great expense and loss of time, altogether failed; thus showing clearly the ability with which the points of the previous triangulation had been selected. The superintendent, in the four years of his personal field-work, has scarce yet passed the limit in which Mr. Borden had preceded him; and if it be ever judicious in such matters to raise questions of economy, it might be well worth asking whether the work done in the field by the present superintendent, at immense expense, has been necessary at all.* To the assistants were assigned the more southern portions of the work, and two bases of verification, near the extremities of the triangulation which had been furnished by Mr. Hassler, were measured by them in 1844.

Upon the appearance of the annual report of the superintendent in 1844, the system of management which was to be adopted began to develop itself, and the purport of the *new* regulations became intelligible. The most important regulation made by the board of 1843, and the only one which materially changed the pre-existing usage in the Survey, was that which directed monthly reports from the assistants, of the strength of their parties, and the progress of their work.† These reports were recommended by the board, for the purpose of avoiding any loss of results from casualty. It was a precaution which had been used in the topographical bureau since 1825, and was recommended by the second officer of that corps, who was a member of the board of reorganization in 1843, simply on the ground that it prevented any chance of loss, and gave to the superintending bureau at once the details of the work executed in the field. Such had been the practice under the reorganization in 1843. The chiefs of parties sent their results to the department to avoid loss by accident, and a statement of the strength of their parties as a criterion by which the disbursements for the season might be regulated, and the parties extended or withdrawn, in proportion to the funds. Under the new system, these reports were changed, both in their direction and character. They were to exhibit a meteorological journal of the weather, and an account of the employment of each day; and instead of going to the department, according to the regulation, they were sent to the superintendent. From these data he was to collate, at the end of each year's work in the field, the number of angles measured, of square miles reconnoitred, or surveyed or sounded by each party; and to determine, by arithmetical computation, the industry or skill which had been used by each assistant in the discharge of his duty.

It will be at once evident that such an estimate of service is scarcely applicable in a primary school, where the studies prescribed are the same,

* At the stations of the main triangulation, under the present superintendence, there are usually thirty tents, with the corresponding equipage.

† "The chiefs of parties, whether engaged upon the land or hydrographic operations, shall make, on the first day of every month, reports showing the strength of their respective parties, and the progress in the work during the preceding month."—(*Plan for the reorganization of the Coast Survey, Art. XII.*)

"The reports required by the 12th article of the plan of the board, to be made by the chiefs of parties on the first day of every month, will be made directly to the Treasury Department."—(*Arrangements and Directions, Art. VII.*)

and the differences to be determined are the quantities either of talent or of diligence which have been applied in their acquirement. But in a work like the Survey of the Coast, prosecuted in various localities, a simple reconnaissance, requiring in one place more skill and time and labor than a triangulation in another. The qualities of the atmosphere, in some places reasonably transparent, and in others almost constantly impervious by fog and vapor, aiding or retarding the exertions of the most skilful operator, and the means both of subsistence and of transportation varying in a still more unequal proportion, it were the height either of folly or imposture to presume that equal means and equal appliances would produce equal results. Yet such was the standard assumed by the superintendent as an estimate of the quantity of work done by each of the parties, and of the relative merits of the chiefs who had directed their operations. In his reports to the department, the number of observations made, the number of square miles covered, either by reconnaissance, triangulation, topography, or sounding, are all that are presented for consideration, no regard being had either to health, climate, or the character of the season.*

This use of mere quantity is a favorite arithmetical process, used chiefly by retired school-masters. It is an exhibition to advantage of the cumulative power of numbers, and delights in solving such problems as to determine the length, in inches, of cotton thread, which would encircle the globe, or how many loaves of bread a man must eat in seventy years; but is too gross and unmeaning to be applied in any case, even of common importance. It was not, however, used unwittingly by the Superintendent of the Coast Survey. He seems to have had a full sense of its value, and of the purposes which it might be made to subserve. Under this estimation of character, when an assistant became obnoxious, it was merely necessary to send him to a bad atmosphere, with an indifferent or defective apparatus, and the monthly report would be taken as evidence against him, furnished by himself.† This plan of operation was made fatal to one of the assistants, in 1846, and severely affected another in the succeeding year.

But if this application of the numerical theory to the work of the assistants has been productive of important results both to them and to the superintendent, there is another application of the same kind, which is of as much importance to the public. In the first report of the superintendent, it was stated that operations in the past year had been carried on in nine different States, and that they would be extended in the year then current, to three or four others.—(*Page 3 of the Report of 1844.*) They have been further extended in each successive year, till now they

* The value attached to this numerical estimate will be sufficiently evident by the following extract from the Coast Survey article in the American Almanac for 1849, page 71:—"The amount of results now obtained is double that under the former plan, for an increase of 50 per cent in the cost."

† This assistant presented journals containing 15,800 readings of an instrument, among which were detected twenty-six misreadings, of one minute. He presented, from these premises, 1,900 results, of which he had rejected thirty-seven. The number of misreadings of one minute (an error usual in such observations) would, in ordinary cases, have been noted only for its paucity. Nevertheless, these defects were quite sufficient to answer the purpose of the superintendent. The assistant was unceremoniously removed, after a long term, (near thirty years of public service,) and at a time of life when this deprivation involved almost certain ruin.

embrace eighteen States; and we are informed, in the paper on the Coast Survey in the American Almanac, that this coming year the whole of the Atlantic coast will be occupied by detached parties of the Survey of the Coast.—(*Vide American Almanac*, p. 77.)

And we learn, from another unprinted authority, that similar parties have been already sent to Mexico and California. This imposing array of States, exhibited as new centres of operation, is as false a use of figures as can anywhere be found. It is intended to mislead the public as to the quantity of work actually done, by enumerating a long list of places, in which a sextant may have been uncovered, or a lead thrown; and its only tendency upon the interest of the Survey has been to increase the official patronage of the superintendent on the one hand, and distract and render it unproductive on the other. To strip the statements of the superintendent of their fallacy, it is only necessary to state, that in six of the nine States enumerated in the first report of the superintendent, the Survey might be considered as completed, before his superintendence began; while the work done in the nine additional States, during the five years which he has been in the office, may be stated as follows:—

In Massachusetts, the triangulation of Mr. Borden has been repeated, this being almost the only field-work in which the superintendent has been engaged. Of this we have already spoken as an operation, the necessity of which might well be questioned at any time; but when seven-eighths of the more dangerous coast is yet unsurveyed, and the only reason for undertaking this portion of the Survey at present seems to be the personal convenience of the superintendent, it assumes a much more exceptionable character. In addition, the Survey of the Chesapeake has been continued southward to below the mouth of the Potomac. The Albemarle and Croatan Sounds have been triangulated, (without a base,) and the topography partially finished. The Mississippi Sound, from Pascagoula to Mobile, has been partially surveyed, and a triangulation and sounding has been commenced in Mobile Bay. Of the reconnaissances made in South Carolina and Texas, little need be said, as they were undertaken merely *ad captandum*; and the expense of the operations, as nearly as can be judged from the report of the superintendent, has only been about \$7,000.

If the five years' work of the present superintendent, with a *personnel* at least twice as large as the largest ever employed under the previous superintendence—an appropriation more than eight times greater than that with which the work began, and nearly twice as large as that with which the former superintendence closed—and with vessels and equipages furnished by the Revenue Bureau of the Treasury Department to the amount of \$240,000—be compared with the eleven years' work done by his predecessor, it will be seen, even using the superintendent arithmetical process, that there is but little difference in the proportional quantities of work done. I exclude from this all comparison of the area of the primary triangulation. The reoccupation of Borden's triangulation put the superintendent at once in the possession of triangles, with sides of from eighteen to seventy miles in length; and superficial square miles by the thousand were covered with more ease than hundreds in any other portion of the Survey.

In the meantime, the outer and more dangerous coast, from Cape Henlopen to Cape Charles, (upon which, a short time since, a vessel of war

was nearly wrecked,) has not been touched. The still more dangerous coast about Cape Hatteras, for the accurate survey of which the work in North Carolina was first commenced, has been altogether neglected.* And while a reconnaissance of the coast of Texas figures largely in the annual report of the superintendent, the geographical position of Galveston Bay is known to be uncertain, to an extent alike shameful and dangerous.

But to arrive more conclusively at the relative expenses and work done under the two superintendences, and also circumscribe somewhat the extent of the paper, which has already exceeded the limits which were designed for it, we may refer to the following statistics, which are based either upon documents, or information acquired directly from authentic sources. And in making any comparison, it must be recollected that the term of Mr. Hassler's superintendence should be reckoned only at eleven years, excluding altogether the year 1817, the operation of that year having tended actually to retard, and not to advance the work; while that of Dr. Bache's (up to the term of his last report) may be reckoned at about four years. The expenses of the two terms must be divided into the actual annual appropriations authorized by law, and the amounts furnished to each from other sources.

The actual appropriations for Mr. Hassler, exclusive of that for 1817, amounted to \$857,549. The appropriations for each individual year have already been enumerated.

The appropriations of the same kind, for the four years of Dr. Bache's superintendence, amount to \$449,000.†

The appropriations derived from other sources must be inferred from the number of vessels furnished by the Revenue Bureau of the Treasury Department, and from the number of officers and men detailed from the naval service. In 1843 the vessels employed in the Hydrography of the Survey were as follows:—

Brig Washington. | Cutter Nautilus. | Schooner Vanderbilt. | Schooner Jersey.

To these were attached eighteen naval officers, and about eighty men. The two first-named vessels were (it is believed) furnished by the Navy and Treasury Departments, and may be valued at \$27,000. This branch of the Survey having grown gradually from 1834, when it commenced with the schooner Jersey, till it reached the above establishment, the amount of pay and subsistence cannot now be accurately ascertained, but may be set down at \$260,000.

Under Dr. Bache's superintendence, the following vessels have been employed, with about thirty-two officers, and one hundred and fifty men:—

* The expenses already incurred in the Survey of the interior sounds of North Carolina may be estimated at about \$80,000. If this sum had been expended in erecting light-houses, in lieu of the light-boats now used in the sounds, the commercial interest would have been benefited to a much greater extent than by the survey of the shoal waters of the interior. The light-house system throughout the country is well known to be very imperfect; but in North Carolina it seems to have been neglected altogether.

† The amount of appropriations from 1843 to 1848 are as follows:—1844, \$80,000; 1845, \$112,000; 1846, 111,000; 1847, 146,000; total, four years, \$449,000; 1848, 165,000.

Brig Washington.	Steamer H. S. Legare.	Schooner George Bancroft.
Cutter Nautilus.	" G. M. Bibb.	" John Y. Mason.
" Phoenix.	" Thomas Jefferson.	" G. M. Bache.
Steamer James K. Polk.	" G. M. Dallas.	" F. R. Hassler.
" R. J. Walker.	Schooner Wave.	

Two other schooners, (names unknown,) making a fleet of 16 sail.

Of these vessels, the steamers, the cutter Phoenix, and the schooner Wave have been furnished by the government, and their value may be set down at \$240,000.

The pay of officers and men, estimated as closely as practicable, for the whole term of four years, will amount to \$204,000.

The number of civil assistants of all classes, in the last year of Mr. Hassler's superintendence, was twenty-seven, of which three were engravers, and seven artificers and heliotropers.* Under the present head of the Survey, as nearly as can be ascertained, the number is sixty-one, exclusive of those employed temporarily. In arriving at this number, it has been necessary to go farther than the official Register, or Blue Book. But the authority is, nevertheless, authentic, and printed. In examining critically the reports of the superintendent, particularly that for 1847, names enough will appear to make up the number, though excluded from the printed list of the corps.

In comparing the work executed under each superintendent, we have but short data on the part of Mr. Hassler. The method so advantageously pursued by his successor, of superficial miles and numbers of observations, made no part of his system. There is, in answer to a question proposed by the Committee of Investigation in 1842, an estimate given of the square miles of primary triangulation from New Haven to Philadelphia, (*Doc. 43 of the H. R.*) which states it at 3,577. An examination of the maps and sketches, which are either part of his official communications, or can be otherwise obtained, will show that a superficies of about 5,760 miles had been covered with primary triangulation during his superintendence.

The superficial miles of primary triangulation made by the present superintendent up to 1847, will, by his estimates, amount to 7,803; of which 6,532 are in the northern triangulation, the principal part of which had been previously executed by Mr. Borden, affording, without any trouble of reconnaissance, sides of from twenty to seventy miles in length, where a single triangle covers more surface than will be found in any other part of the Survey in the work of years. This sort of comparison, instituted with great foresight by the present superintendent, is so manifestly absurd, as to require no other exposition of its fallacy than simply to compare the quantities of the northern and southern portions of his own work. The one is 6,532, and the other 1,271.

If, instead of this method of estimating, we compare either the length of the shore-lines of each work, or the surfaces covered by the secondary triangulation, we shall arrive at a safer judgment of the mere matter of quantity, though even then, such an estimate, made without regard to the nature of the country and other circumstances, is entirely useless and uncertain. A large map of the United States is the only document necessary to be referred to.

* Heliotropers are persons used in managing an instrument called a heliotrope, for signals at distant points.

From this it will appear that Mr. Hassler's secondary triangulation, covering the outer coast and shores of Long Island Sound, and extending southward to Cape Henlopen, has an area of 8,100 square miles. During Dr. Bache's superintendence, according to his own estimate, the secondary triangulation amounts to 2,723 square miles.

If, leaving these technical and inapplicable methods, we examine merely the respective lengths of *outer* sea-coast which has been surveyed, it will be seen that, under the first superintendence, there is a length of two hundred and sixty miles, comprehending the dangerous and difficult coast of New Jersey; while that of the present superintendent, extending principally from Buzzard's Bay round Cape Cod, shows only a length of about eighty miles, and that, too, on a part of the coast previously better known than any other of its whole extent. It was wont to be the opinion that bold and rugged coasts were usually the safest, as affording capes and headlands for land-marks, or sites for beacons, warning the mariner of danger, or indicating the approaches to his desired harbor. But at present we are apprehensive, if the "north countrie" continue to excel in the coming years as it has in the past, in luxuries both of learning and living—tourists and tautog—savans and salmon—should its summers be as bracing and its winters as festive as heretofore, there will be no end to the discovery of shoals about its rock-bound but blessed shores; and they will long be considered, by both mariners and hydrographers, as infinitely more dangerous than the sunken and sandy beaches of the South, where the ship strikes before the land has been discovered; and which are, for the greatest part of the year, literally strewn with wrecks.

If these data be correct, (and those referring to expense must be very nearly so,) the following summary will show the relation between the economy of the two superintendencies:—

	Mr. Hassler.	Dr. Bache.
Direct appropriations.....	\$857,549	\$449,000
Constructive appropriations, vessels.....	27,000	240,000
" " pay.....	260,000	204,000
Total.....	\$1,144,549	*\$893,000
Average expense of 1 year.....	104,050	223,250
Vessels.....	4	16
Civil assistants.....	27	61
Naval officers†.....	18	33
Total.....	45	94

QUANTITY OF WORK.

Primary triangulation.....in square miles.	5,760	7,803
Secondary triangulation.....	8,100	2,723
Line of sea-coast.....miles	260	80

According to this, the average annual expense of the first superintendence would be less than half that of the other, and the actual amount of work done, estimated by a plain and strictly just rule, would be in favor of Mr. Hassler in about the proportion of six to five; while the increased

* The expense of Dr. Bache's superintendence up to the end of this year will be about \$1,112,000.

† Officers of the Army have also been, and are now, employed in the Survey. Their number and terms of service has recently been so uncertain that no reference has been made to them.

number of assistants has more than doubled the official patronage of the superintendent.

Thus much for the field-work of the Survey. It remains that we take some notice of the publication of maps and charts, which are the exponents of its value to the country.

At the time of Mr. Hassler's death, four sheets of the large chart of the Bay and Harbor of New York were engraved, and ready for publication. A reduced chart of the same was also considerably advanced; and the work in the Delaware, of which the survey and soundings had been almost completed, had been reduced, and was ready for the copper. Up to the present time, the following charts have been published:—

6 sheets of New York Bay and Harbor.	1 sheet of Harbor of Edgartown.
3 sheets of Delaware Bay.	“ “ Oyster Bay.
1 sheet of Harbor of New London.	“ “ South of Cat Island.
“ “ New Bedford.	“ “ Annapolis.
“ “ New Haven.	“ “ Little Egg.
“ “ Bridgeport.	“ New South Shoal.
“ “ Black Rock.	“ Fisher's Island Sound.
“ “ Holmes' Hole.	“ Horn Island Channel.
“ “ Tarpaulin Cove.	“ Entrance of Mobile Bay.

All these, with the exception of New South Shoal, Horn Island Channel, Harbor South of Cat Island, Tarpaulin Cove, Holmes' Hole, and the entrance of Mobile Bay, are grounded upon surveys of the first superintendence. The charts of New York Harbor, of Delaware Bay, and the southern shore of Long Island, are the most important of the series, and exhibit the greatest amount both of topography and sounding. The chart of Long Island is still incomplete; and the sheets of the Delaware were much delayed, for a reason which it will be necessary to mention.

Some time between the years 1836 and 1840, the War Department directed an examination to be made of the defences at the entrances of the principal harbors. The officer who made this examination (Major Hartman Bache) discovered differences, which were deemed to be essential, in the topography delineated on the maps of the Coast Survey, and the shores as actually found at that time. The most important of these differences were understood to have been found at Sandy Hook, at the Narrows of New York Harbor, and some other points of Long Island, which came under the view of the examining officer. It will be noticed that the low sandy beaches which characterize the whole line of coast south of Rhode Island, are but half formed, and subject to constant, and, in some cases, to periodical changes. The shores about Sandy Hook, particularly, having been more the subject of observation than any other, undergo changes which can now be predicted with tolerable certainty. Charts of such shores should contain, as a necessary piece of information, the dates of the surveys upon which they are founded. The differences at Sandy Hook were deemed of so much importance, that the engraved sheets were corrected, and communications made public, indicating that the former survey was erroneous, and of course laudatory of the accuracy and acumen of the present superintendent. The discovery of these differences induced an examination of other portions of the Survey, when other differences were discovered. Resurveys were directed, as is understood, over very extensive portions of Long Island Sound and the Delaware, and the charts which had been partially engraved were altered, in conformity with the new surveys. This, it is understood, has delayed the execution

and publication, both of the charts of Long Island Sound and the Bay of the Delaware.

These resurveys over work which had already been done have been very extensive, and very slight differences have been made subject to examination and revision. On this we would remark, that in surveying with a Plane table, (the instrument used for the topography of the Coast Survey,) no two operators would produce precisely the same configuration of the shore or representation of the topography; and the differences between the two maps thus produced would be greater in proportion to the irregularities of the shore and surface. It cannot be expected that the topography of the whole coast should be executed with the accuracy required as preliminary in military and civil constructions. Important differences should of course be corrected; but to examine every slight variation is to do what is both unnecessary and useless, because the second result, though different, might be as inaccurate as the first; and the only process by which satisfactory surveys could be procured, with the plane table, would be to have each portion of the coast gone over by three different persons. If superintendents of the Coast Survey are to succeed each other frequently, and each is to consider it a principal and primary part of his duty to review the works of his predecessor, we apprehend that the survey would always be confined within the same limits, and that those limits would be found where the country is most thickly settled, and the climate most genial.

But another matter, also expletive of the *morale* of the Survey of the Coast, is entitled to more decided notice. The sheets of the Delaware and Long Island were found erroneous, not only in the representations of the original field-maps, but in their first reduction to the paper—the reduction having been made principally by an assistant, then occupying the fifth place in the Survey. To such an extent were the reductions found erroneous, that going over the work and planishing out the portions of it which had been already engraved, has more than doubled the expense of the charts, and delayed for about two years their publication. Yet, while other assistants have been removed or displaced for trifling or pretended causes, this assistant has been unceremoniously promoted over three of his seniors in service and superiors in talent, and now occupies the second place in the Survey.

We had intended here to take a brief notice also of the establishment for the construction of weights and measures, in the same points of view as we have examined the Coast Survey, that is, regarding the economy of its execution, but find that this is a subject which cannot be touched now. The disbursements have all been made under the authority of a joint resolution, without either specific appropriation or prescribed method of account.

We will close this notice of the Coast Survey, which has much exceeded the limit originally intended for it, with the expression of a hope that Congress may, before long, institute a close investigation into the management of this important work. We are aware that its proper execution is important, as well to the interest of science as to those of commerce, and that it opens a wide field for the development and exercise of talent. We should wish to see this field fully occupied, affording space and opportunity for early exertion, and support and remuneration for long continued service. These, apart from the main design, are proper objects

to be kept in view ; and thus managed, it would deserve and receive the patronage and support of the country. The case, however, will be different, when these aims are forgotten ; when, for want of the proper visitation and supervision on the part of the general government, a great public work is monopolized by a particular clique or faction, is used for mercenary or political purposes, for the indulgence of private pique, or the aggrandizement of personal and family influence. * J.

Art. II.—LAWS OF GEORGIA WITH RESPECT TO COMMERCIAL TRANSACTIONS.

A SYNOPSIS.*

OF THE SYSTEM OF LAWS OF FORCE IN THIS STATE, AND OF THEIR ORIGIN.

THE laws of force in the State of Georgia consist of the Common and Statutory Laws. The Common Law of England, and some of the more important statutes of that country, form the foundation of the legal code of this State. The Common Law of England, and all acts, clauses, and parts of acts in force, and binding on the inhabitants of Georgia, as a province, on the 14th May, 1776, not inconsistent with the Constitution, laws, and present form of government of the State, were declared of force, at an early period in the history of the State. Many provisions of the common law, and of the statutes of England as then existing, have been modified and repealed ; but some of the more important are yet in full effect, and consequently the expositions of the English courts are recognized here. Magna Charta, the petition of rights and bill of rights, and the charter of the province of Georgia, prompted by George II. in his fifth year, 1732, are material parts of the system ; and among the more important statutes existing in an original state, or nearly so, may be named the Habeas Corpus act of 31 Charles II., the 27 and 13 Elizabeth, with respect to Fraudulent Conveyances ; the 6 Edward I., regarding Dower ; the 9 and 10 William III., upon the subject of Protests of Bills of Exchange ; the 3 and 4 Ann, upon the subject of Bills of Exchange and Notes ; the 29 Charles II., respecting Leases and Rents ; the 21 Henry VIII., upon the same subject ; the 4 George II., upon the Rights of Landlords and Lessees ; the 32 Henry VIII. ; the 34 and 35 Henry VIII. ; the 29 Charles II. ; the 20 Henry III. ; the 25 George II. ; the 4 Ann ; the 3 William and Mary, upon Wills ; the 25 Edward III. ; the 13 Edward I. ; the 4 Edward III. ; the 6 Edward I. ; the 8 and 9 William III. ; the 4 Ann, upon Parties and Limitations of Actions.

OF THE PUBLICATIONS IN WHICH THE LAWS OF GEORGIA ARE FOUND.

The compilation of English statutes of force in this State, directed to be prepared, under the authority of the Legislature, by William Schley,

* For the present synopsis of the laws of Georgia, and for similar articles in relation to several of the Southern States with respect to commercial transactions, we are indebted to the Hon. BENJAMIN F. PORTER, of the Tuscaloosa (Alabama) Bar, a gentleman of eminent legal attainments and great moral worth. Judge Porter's practice of the law is not confined to Alabama, but extends to Georgia, and a wide region in the vicinity of those States.—*Editor of the Mer. Mag.*

Esq., in 1823 ; Prince's Digest of Statute Law ; Hotchkiss' Digest, prepared in 1845, and the several volumes of Supreme Court Reports, by Kelly, consisting now of three volumes, are the most important. Hotchkiss' work is very valuable, not only from its very recent publication, but from the faithfulness with which it has been compiled, and the superior arrangement pursued. Of Kelley's Reports it must in justice be said, that in the ability of the decisions reported, in the excellent manner of reporting, and in typographical execution, they are equal to the best of any of the American Reports. In addition to these, Howell Cobb, Esq., has published a most valuable book of forms, of great usefulness to the practicing counsellor, and the various judicial and ministerial officers of the State.

OF THE SEVERAL COURTS OF GEORGIA.

The courts of this State are a Supreme or Appellate Court, Superior Courts of general jurisdiction, Inferior Courts of general jurisdiction, and certain courts of special jurisdiction, embracing Corporation Courts, Justices Courts, Courts of Equity, and Courts of Ordinary.

The Supreme Court of Georgia was organized in 1845, and consists of three judges. It is a court of correction of errors, and has no original jurisdiction whatever.

The Superior Court has a general original jurisdiction, exclusive in all criminal cases, except in some few cases confined to inferior and special jurisdictions, in all cases involving title to lands, and a concurrent jurisdiction, in all other civil cases, with the Inferior Courts. It has also power, by certiorari and new trials, over the Inferior Courts, and appellate jurisdiction in other cases provided by law.

The Inferior Court has a concurrent jurisdiction in civil cases, with some exceptions, with the Superior Court.

OF THE COMMENCEMENT OF ACTIONS OR SUITS IN THE SUPERIOR AND INFERIOR COURTS.

1. All suits of a civil nature are begun by petition, setting forth the plaintiff's claim. To this the clerk of the court annexes a process, requiring the defendant to appear at the court to which the process is returnable, and is to be served on defendant seventeen days before the return day. A copy of the petition and process is to be served on the defendant, or left at his place of residence.

2. *Of Bail.* Should bail be required, the plaintiff shall be required to make oath before any judge, justice of the Inferior Court, justice of the peace of the State of Georgia, or judge or justice of a Superior Court of any one of the United States, to which is to be annexed the seal of the particular State, and a certificate of the governor, certifying that the person taking the affidavit is such judge or justice,—1. Of the amount of the debt claimed. 2. That he has reason to apprehend the loss of said amount, or part of it. The bail may be required on these conditions when the process is first sued out, or during its progress.

3. *Of Attachment.* Suits may also be commenced by attachment in the case of non-residence, or where both debtor and creditor are beyond the State ; or when the debtor is removing without the State, or any county of it, or absconds or conceals himself, or stands in defiance of a peace officer, so that the ordinary process of law cannot be served. These

facts, or one of them, must be shown to exist by oath, and a bond and surety be given. On attachments are grafted the ordinary garnishment process, answering to the Trustee process of Massachusetts.

The bond required to be given by the plaintiff in attachment, is to be in a penalty double the amount sworn to be due, to which there must be surety. The condition is, to pay all costs and all damages which may be incurred "for suing out the same."

Attachments are authorized when the debt is due in future, and on suits pending. Property attached is privileged to be replevined. Liens are created in favor of those first levied.

ACTIONS UPON BONDS, ETC.

The 8 and 9 William III. are of force, giving full costs in actions of trespass, and authorizing the assignment of any number of breaches in actions on bonds, covenants, or agreements.

LIMITATION OF ACTIONS.

Ejectment, seven years; actions on the case, other than slander, actions of account, actions of trespass, debt, detinue and replevin, for goods and cattle, of trespass, *qua. claus. fr.*, four years; trespass, assault, battery, and wounding and imprisonment, two years; case for words, six months; actions on bonds or other sealed instruments, twenty years; upon notes or other acknowledgments under the hand of the party, six years; upon open accounts, within four years; upon penalty, fine, or forfeiture, six months.

PARTIES TO, AND COMMENCEMENT OF, ACTIONS.

Co-obligors upon any bond, note, or writing, who reside in several counties, may be sued in either; and joint contractors or copartners may be sued in the same action, and upon service upon either, the plaintiff may proceed to judgment, as to the party served; and judgment thus obtained authorizes execution against the joint, or partnership, or individual estate.

Representatives of deceased persons may be sued in the same action with the survivor, on notes or writings, signed or sealed by two or more. Representatives, however, are privileged to exemption from suit for twelve months, after the grant of letters, or probate of wills.

Suits do not abate on the death of a party, but are revived by *scire facias*. In the case of the death of a plaintiff, his representative has a *scire facias* served on the defendant within three months after grant of letters or probate of will; and in the case of the death of a defendant, a *scire facias* issues to his representative after the expiration of twelve months. On the death of one of several jointly interested, the suit may proceed against the survivor, the death being suggested upon the record.

The petition being taken out and process served, the defendant is required to appear at the return term, and on or before the last day thereof file his defence, in writing, plainly set forth, and signed by the party or his attorney. The denial of deeds, bonds, bills single, penal notes, drafts, receipts, or orders, must be accompanied by affidavit. Indorsements are admissible in evidence, without proof of handwriting. Copartnerships of plaintiffs are not required to be proved, unless put in issue by pleas in abatement.

Mutual debts and sets-off are allowed, provided the defendant files, with his answer to a suit, a copy of the subject matter of the set-off. These

sets-off cover the cases of open accounts for dealings between the parties to the suit, and of any bond, note, bill, or other writing for money, or other thing, held and possessed by the defendant in his own right.

Partial failure of consideration may be plead upon a contract in such cases, and between such parties as between whom and which total failure of consideration would be pleadable.

PLEAS OF USURY.

If these are filed, the plaintiff, within one month after the filing of it, and upon a copy served and notice, is required to discover on oath whether the facts of the plea are true. If the plaintiff fails to make the discovery, the defendant's affidavit may be made. These may be read as evidence on the trial by either party.

OF EVIDENCE.

When witnesses reside out of the State, or out of the county when his testimony is required, either party (in civil cases) on ten days' notice, and a copy of the interrogatories, may sue out a commission to examine such witnesses. Witnesses thus situated may be compelled to appear and answer. So witnesses going beyond seas, removing out of the county, or beyond the jurisdiction of the State, or whose official or other business require their absence from the county, or from age or bodily infirmity unable to attend court, and females, may be examined as above. The same provisions have been also extended to persons residing out of the State, or county, or seamen, patroon of a boat, stage driver, mail carrier, and to all other persons whose testimony cannot be duly obtained.

Certificates, protests, and other acts of notaries public in relation to the non-acceptance of any bill of exchange, draft, or other order, made for the payment of money, or other thing, and also in relation to the non-payment of any bill of exchange, draft, order, bond or note, for the payment of money, or other thing, are presumptive evidence of the facts, without other or further proof.

The statute of 11 Henry VII., entitling indigent persons to sue without liability for costs and fee, is of force in this State.

OF SPECIAL LIENS.

These are given to masons and carpenters for all debts due for work done, or materials furnished for building or repairing any house, where personal security is not taken; and they create an incumbrance upon the house and premises, superior to any other claim, irrespective of its nature or date.

OF THE EQUITY JURISDICTION OF THE STATE OF GEORGIA.

The Superior Courts exercise the powers of a Court of Equity, in all cases where a common law remedy is not adequate, in cases between co-partners and co-executors, to compel distribution of intestates' estates, and payment of legacies, and for the discovery of fraudulent transactions, for the benefit of creditors. In case either party is dissatisfied with the verdict of a jury, in any equity case, he has the right of appeal to a special jury, selected by alternate challenges, or strikings from the Grand Jury.

The general rules of chancery pleading and practice, and the leading

principles of that jurisdiction, seem, with few alterations, to govern the equity courts here.

It may seem strange, to those who have learned equity from the luminous interpretations of the Pretors, of Lords Hardwick, Eldon, and Macclesfield, to witness the trial of chancery suits, by twelve chancellors, drawn from the country; but however anomalous this proceeding, it is not half so intolerable as equity administered by chancellors, drawn up, like forced shoots from an asparagus bed long before their season, from the hot bed of political preparation. When to devoted partizans, accustomed to nothing but an obstinate pursuit of party names, and the malignant exercise of dominant power, is committed the authority which is rarely safe but in the wisdom of age, and the most self-denying and impartial mind.

It may, however, be said, that so far as the writer has had an opportunity of observing, the exercises of the chancery jurisdiction, as well as that of the common law in Georgia, is kept perfect by the judges of the superior courts, who, for these times of political excitement, seem, far more than is usual, selected for their legal ability and personal integrity, irrespective of party influences.

OF CONTRACTS REQUIRED TO BE IN WRITING.

The 29 of Charles II., in original terms, is of force in Georgia. It recognizes no contract of the representative of an estate to bind his own estate; or of one person for the debt of another; or upon any agreement upon consideration of marriage; or for the sale of lands, or any interest in them; or upon agreements not to be performed within one year, as binding, unless the agreement be in writing. So no contract for the sale of goods, wares, and merchandise, for ten pounds sterling or upwards, without the receipt of part of them, or earnest, is valid, unless also in writing.

OF BILLS OF EXCHANGE, AND PROMISSORY NOTES.

All bills of exchange drawn in, or dated at and from any trading city or town, for the sum of five pounds or upwards, upon any person or in any trading city or town, or other place, payable at a certain number of days, weeks, or months after date, after those days after due, may and shall be protested by a notary public; and in default of said notary, by any other substantial person of the city, town, &c., in the presence of two or more credible witnesses. (9 and 10 William III.) Such protest within fourteen days to be sent, or notice given thereof to the party from whom the bill is received. Protests also allowed for non-acceptance.

No acceptance of any inland bill is sufficient to charge any party to it, unless endorsed, or underwritten, thereon.

No protest necessary, either for non-acceptance or non-payment, unless the value be acknowledged and expressed in the bill, and be for the payment of twenty pounds and upwards.

The acceptance of a bill for a former debt shall be accounted payment of it, if due course for acceptance and payment be not taken. (3 and 4 Ann.)

The damages on domestic bills, or bills drawn or negotiated in Georgia, upon any person of any State, Territory, or District of the United States, is five per cent upon the principal sum. The same provision ap-

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plies to all bills drawn in Georgia, and made payable at any place out of the United States, without reference to the residence of the drawer.

On bills drawn in this State, upon any place beyond the limits of the United States, the damages are ten per cent, besides interest, costs, and premium.

All notes in writing, signed by any person, body politic or corporate, or agent, banker, goldsmith, merchant, or trader; and also every such note payable to such person, or order, shall be assignable and endorsable in the same manner as inland bills; and the persons to whom assigned may maintain action in their own names. (3 and 4 Ann.)

All bonds and other specialties, and promissory notes, and other liquidated demand, whether for money or other thing, is negotiable by endorsement in the same manner with promissory notes.

A demand of makers of promissory notes, and notice to the endorsers, is not necessary to bind them.

Endorsers are placed on the same footing with sureties, and bound as such, and are suable in the same manner, and in the same action, with the principal or maker. Exception prevails as to notes in bank.

Endorsers and sureties may require the holder of any note, or other instrument, after maturity, to collect the same; and a failure to proceed operates as a discharge.

TIME AND INTEREST.

In computing time and interest, the day increasing in leap year shall be accounted one year, and be reckoned by calendar months.

In calculating interest, when payments shall be made, the payment is to be applied, first, to the discharge of interest due; and no part of the principal is to be considered paid, until all interest is extinguished.

All contracts, bonds, notes, and assurances for illegal interest is void, but the principal is recoverable.

OF THE EXECUTION OF POWERS OF ATTORNEY, AND OTHER WRITINGS IN OTHER STATES.

Bonds, specialties, and letters of attorney, and other powers in writing, are admissible in evidence, proved by one or more of the witnesses by affidavit, or affirmation in writing, before any governor, chief justice, mayor, or other justice of either of the United States, where they are executed, certified and transmitted under the common or public seal of such State, court, city, or place where proved. The affidavit must, however, express the addition of the party making it, and the place of his abode.

OF SALES OF LANDS BY POWERS OF ATTORNEY.

Sales of lands by letters of attorney expressly giving power of sale, if proved as mentioned in the last clause, or proved in Georgia before a justice of the peace, by one or more of the witnesses, is good and valid. Such powers and sales of lands under them are valid, till the attorney or agent has due notice of revocation or death.

OF THE EXECUTION OF DEEDS.

Consuls and vice-consuls of the United States, duly appointed and recognized, are authorized to receive acknowledgment in writing of citizens

of the United States, or other persons residing in the several consular districts, of deeds of conveyance, mortgages, powers of attorney, or other legal instruments, touching real estate, or other property, or rights or interest, lying in Georgia; and their certificates, under their official seals, are sufficient to authorize their admission as evidence. This power also extends any lawful contract or engagement to be executed in Georgia, or any act whatever lawful to be made.

OF RELINQUISHMENTS OF DOWER.

Alienations and conveyances made by husband and wife by joining in the deed, or by the wife's acknowledgment of consent to the sale, before justices or magistrates, are good in this State.

OF DEEDS OF LAND, AND THEIR REGISTRATION.

Deeds of lands to be by deed of bargain and sale, deeds of lease and re-lease, or by deed of feoffment; to be under hand and seal, in the presence of two or more witnesses, and proved and acknowledged before a justice of the peace, chief justice, or one of the assistant justices, and to be registered by the clerk of the inferior court of the county in which the lands lie, within twelve months from the date of the deed.

SEALS—HOW CONSTITUTED.

Seals are constituted by scrolls or other representation of a seal, when it is expressed in the body or conclusion of a writing that it is the intention to execute a sealed instrument. But this intention is sufficient without a scroll.

ESTATES—THEIR CREATION.

All gifts, grants, bequests, devises and conveyances of every kind, of real or personal estate, capable of passing an estate in entail in realty, by statute, (West. 2.) vests in the party an unconditional and absolute fee simple.

All gifts, grants, feoffments, bequests, devises and conveyances of real or personal estate, vests in the grantee an absolute fee simple estate, unless a less estate be expressed.

OF TRUST ESTATES.

All creations and assignments of trusts in lands, tenements, or hereditaments, shall be manifested and proved by writing signed by the party, or by last will. Such trusts are, however, authorized to be taken by implication from conveyances.

OF MORTGAGES.

Mortgages of lands and personal estate are to be registered in the office of the clerk of the Superior Court, within three months from the date of the deed.

Mortgages of personal estate, executed when the property is beyond the limits of the State, and afterwards brought into it, must be recorded within six months after being brought into the State. Judgments obtained before the foreclosure of such a mortgage not recorded, have a precedent lien.

OF FRAUDULENT CONVEYANCES.

The statutes of 27 Elizabeth and of 13 Elizabeth, upon the subject of fraudulent assignments, and deeds to defraud creditors, are, in original terms, of force here. These provisions are too well known to make it necessary to copy them.

OF WILLS AND TESTAMENTS.

Devises and bequests of lands must be in writing, signed by the deviser, or by some person in his presence, and by his express directions, and be attested in his presence by three or four credible witnesses. (25 George II.)

Wills of personalty only revokable by writing, and proved by three witnesses at least.

The 29 Charles II., upon the subject of nuncupative wills, are of force here.

Wills and testaments are void, if not registered within three months from the testator's death.

ART. III.—PROTECTION OF VESSELS FROM LIGHTNING.

To FREEMAN HUNT, Esq., *Editor of the Merchants' Magazine.*

DEAR SIR:—I have read with great interest the article in your Magazine for December last, on *The Protection of Vessels from Lightning*, as I did, at the time of its appearance, the article of the Merchants' Magazine of June, 1846, to which it alludes.

For some years I have regarded the subject of marine lightning rods as one of vast importance, and yet, although abundantly understood to answer the highest ends of practical utility, in its theoretical affinities far from being exhausted by the researches of science. It is replete with curious and instructive phenomena, alike worthy of the continued study of philosophers, and of the liberal patronage of merchants and governments interested in the floating palaces of commerce, and navies.

Motives of humanity, so well urged by your December correspondent upon the consideration of your readers, conspire to invest it with powerful claims upon the enterprise and means of the mercantile and naval men of our country; and more methodical concert of action and provision in its behalf by the general government and ship-owners, may advantageously be instituted. Nay, it should not be longer neglected.

The federal government has deemed it incumbent upon its constitutional and exclusive guardianship of commerce, to prescribe by law certain provisions and stores, such as medicine-chests, &c., that every merchant ship shall possess before clearing from port on a voyage. It has imposed proper vigilance and penalties upon cases of neglect in these particulars.

Since the law is as well established that metallic conductors, properly fitted in respect to form and position, will completely protect vessels and their crews and passengers from the destructive effects of atmospheric electricity, as that medicines, judiciously administered, will relieve the men who work these vessels, and the passengers who sail in them, from the effects of disease; and since death and destruction can visit neither one

nor the other, where no precautions are taken, with more certain or terrific power than in the shape of the electric fluid, why is it that the government of the United States has thus long neglected to exert its prerogative in behalf of commercial interests, and the seamen, who constitute their and the nation's bulwark, in suitable legal enactments on this subject? Why not here, as in other matters, specifically exact the requisite means of preservation—the size, form, and number of electric conductors—to be provided, and properly adjusted to every vessel that leaves an American port?

Can it be that anything problemetical in respect to the sufficiency of these means to answer the desired ends, remains to be solved? Is not the testimony of Franklin, of Beccaria, of Cavallo, of Hare, of Henry, of Faraday, of Wheatstone, and of a host of other philosophers, uniting all of eminence among either the dead or living since the day of Franklin's earliest discovery of the fact, sufficient to set at rest all skepticism upon the subject? The official report of the Committee of the British Admiralty, adverted to by your before-named correspondents, sets out with the incontrovertible truth on the subject of conductors, thus:—"The fact of their efficacy may be considered to be established beyond all doubt by the experience of the last eighty years, and the UNANIMOUS OPINIONS OF SCIENTIFIC MEN OF ALL COUNTRIES."—*Annals of Electricity*, vol. 5, page 1.

An authority thus eminent and emphatic cannot need enforcement or illustration by quotation of the individual opinions, nor of the instances on record of actual demonstrations, by which it is supported.

I will only remark, that according to the learned Mr. Cavendish, "the chances of escape from lightning is in this way increased by at least four hundred million to one, even with a conductor of iron."—*W. Snow Harris' Annals of Electricity*, vol. 5, page 213.

To the ship-owner, and to the national legislator, it must be an equally sad and comfortless reflection, when they read of the destruction by fire, or other disability from lightning, of some noble ship at sea, carrying hurriedly and awfully into an insatiate eternity the confiding crew and passengers, that a few almost costless strips of copper or iron rods, judiciously affixed to the exposed masts and hull of the otherwise doomed vessel, would have passed her and her dauntless inmates unscathed from beneath the fiery shock, and beyond every shadow of doubt and danger!

If every vessel that passes into the Gulf Stream in going to or from the ports of the United States, were liable, in despite of all human foresight and skill, to be carried within the soundings of some island where grows nothing but the fabled *Bohan Upas* tree, and, of consequence, be exposed to the fatal strokes of its effluvia, and yet it were well known that there existed a very common and cheaply obtained herb, the disinfecting efficacy of which on board of ships were equal to a perfect counteraction of all the noxious influences of the dreaded island, can it be doubted, that among the earliest sanitary laws which the Congress of the United States would throw around her noble mariners, both in the merchant and naval service, would be one demanding a supply to every ship of the invaluable herb mentioned?

And yet, the case imagined and the case that actually exists, are equally simple in their elements, no less imperative in their claims upon the government, and no less susceptible of ample and full relief. But the existant one, so far as the guardianship of Congress over the merchant service

of the country is concerned, is neglected to the same and like degree as the imaginary one! Ought it so to be?

To the British Admiralty's report to Parliament, in all its details, I have not now opportunity of recurring; but from your two correspondents' articles, and from other sources of information at hand relating to that report, I gather the following facts as being contained in the record of observations which Sir W. Snow Harris presented to the Admiralty. "He reports," says your December correspondent, "one hundred and thirty-three cases of injury from lightning in the *British navy* during twenty-four years of war, and fifty-five during the same number of years of peace," while the vessels were mostly laid up in ordinary.

"In one hundred cases alluded to, sixty-two seamen were killed, and about one hundred and fourteen wounded. These are exclusive of one case of a frigate, in which nearly all the crew perished, and of twelve cases in which the numbers killed or wounded were set down in the accounts given as *several or many*."—*Silliman's Journal*, vol. 38, page 113; also *Merchants' Magazine*, vol. 14, page 524.

Mr. Harris reported 174 cases of vessels struck by lightning, registered by him up to 1839; and your December correspondent says, "In a publication by W. Snow Harris, Esq., F. R. S., in the year 1844, two hundred and ten cases are alphabetically reported in the *British navy alone*, of injury from lightning." And it is said that "the injuries sustained in the British commercial marine" are "equally or more extensive in proportion to the Royal Navy."

Your earlier correspondent says, "I have kept a record of lightning storms for a number of years, and of the damages done by lightning, and of the destruction of life and property. The catalogue now numbers more than *four hundred cases of loss of life*."—*Merchants' Magazine*, vol. 14, page 524. This aggregate includes, I presume, cases on land as well as on the water.

Looking at these numerous evidences of constant exposure of vessels to lightning, the imagination ought not to be forced to conjure up the existence of an island of Bohan Upas trees, to arouse the sensibilities of American merchants, and of the American Congress, to a just and favorable contemplation of the seafaring man's claim upon the further protection due to his profession, in the matter under remark. The exposure is imminent—longer neglect will be scarcely short of criminal, on the part of both merchants and Congress.

The genius of *Franklin* is venerated, yet its humane admonitions are disregarded by his countrymen. Aided by the ingenuity of *Morse*, a worthy disciple of *Franklin*, we know they promptly employ the electric rod everywhere; that *money* is to be made by the use of it. Shall it be said, that where *life* is to be saved by its use, its availability is not cared for? It would be a national sin, as well as a national shame, for characteristic distinctions, like the ones here put, to become proverbs against our countrymen.

The different forms of conductors that have been hitherto used in vessels are—

1st. A copper chain, composed of rods about two feet in length, and about one-sixth of an inch in diameter, with an eye at each end. These rods are linked together by rings, and the conductor terminates in a rod of the same dimensions, which tapers to a point, and is made with a turn

in it near the base, to receive the line, to which it is attached throughout its whole length, for stopping to the topgallant-backstay when triced to the mast-head. These were formerly the only ones in use in the British navy, and are still used there to some extent, as they are in the American navy.

In some merchant vessels, iron chains, instead of copper, similarly made to the above, have been in use.

2d. A metallic rope, composed of mixed metal wire, attached to the mast-head immediately under the truck, leading down to the topgallant cross-trees, and thence by the topgallant-backstay to the channel, and descends into the water. A copper spindle, about three feet in length, tapering from an inch to a point, is screwed into the mast-head, nine inches of the upper end being hardened and gilded. These have been in use in the French navy.

3d. Two plates of copper, rivetted together so as to form an electric and continuous line of metal, the inner plate being one-sixteenth, and the outer one-eighth of an inch in thickness, inserted in dovetailed grooves in the after part of the masts, and extend from the truck to the keelson; a copper plate of the same dimensions is led over the caps, and the continuity is preserved at all times by a tumbler on the caps, consisting of a short copper bar, with a hinge at the base, by which it leans against the conductor of the topmast, whether bedded or housed; a stop is placed on the exterior, by which the tumbler is prevented from falling backwards. Copper plates of equal dimensions to those on the lower masts are placed under the heels and steps of the masts, and are thence led along the keelson in contact with the copper fastenings. In order to insure connection with the copper sheathing, bolts are driven transversely through the keel, so as to meet those passing down from the keelson. Copper plates are likewise led along the under side of the beams of the lower and orlop decks to the principal copper fastenings, and ultimately terminate in the sheathing, thereby combining all the chief masses of metal in the hull and spars of a ship with the conductors, and affording, by means of its ultimate connection with the copper sheathing, a vast surface in contact with the water for the dispersion of the electricity.—*See Committee of British Admiralty Report, abridged; Annals of Electricity, vol. 5, page 5.*

The last described conductors are the invention of W. Snow Harris, alluded to by your correspondents; and several of them were for many years affixed to British naval vessels, with evidences of an indubitable character, derived from actual experience and observation, of their unqualified efficacy, prior to the Admiralty report of 1839, last cited. Your December correspondent says the Board of Admiralty finally disapproved of them, because of their leading the electric current into the body of the vessel. This decision I have not seen. The committee of investigation, appointed by the Board on the subject, came to the opposite conviction, and upon the most minute testimony, derived from particular examination made by Professors Farraday and Wheatstone, as from other sources. In like manner they overruled every objection made to this plan of conductors, and several were made with earnestness. The conclusion of their report was as follows:—

“We again beg to state our unanimous opinion of the great advantages possessed by Mr. Harris’ conductors above every other plan, affording

permanent security at all times, and under all circumstances, against the injurious effects of lightning, effecting this protection without any nautical inconvenience or scientific objection whatever; and we therefore most earnestly recommend their general adoption in the Royal Navy."

Other forms of marine conductors have been suggested, but I am not aware that they have been reduced to practice in any instance. One of these, by Martyn Roberts, Esq., was submitted to the British Admiralty Committee conjunctively with the plan of Mr. Harris, and is in its elementary parts and form similar to the French naval conductors. He thus describes it:—

"Let conductors be made of a metallic rope, consisting of some hundreds of pure annealed copper wires, laid up as a common hemp rope; it will be pliable, may be rove through blocks, and traverse as well as any other rope. Let this rope be fixed to a copper point at the highest mast-head, led down the after part of the mast until it arrives at the lower mast-head, and from thence led as a backstay to the outside of the ship, and there fastened to her copper sheathing. By this means, a perfect metallic conducting channel is maintained for the lightning from the highest point to the water, without interruption or contact with anything that can possibly produce ill effects."—*Annals of Electricity*, vol. 1, page 469.

Mr. Sturgeon, the able editor of the *Annals of Electricity*, zealously contested the efficacy and safety of Mr. Harris' plan of conductors, mainly on the ground, first, that their form and adjustment were calculated to produce *lateral* discharges of the electric current, equally dangerous and destructive as the main charge; second, that conducting the charge into the hold of the vessel by means of lateral discharges, the powder magazines and other combustible material would be exposed to additional hazards of ignition, yielding to the necessity of having fixed and permanent conductors. Mr. Sturgeon proposed substituting four cylindrical copper rods to each lower mast, situated exterior to the shrouds, having one *before* each fore-shroud, and one *aft* each after-shroud. The upper extremities of these conductors to be attached to the fore, main, and mizzen tops, as distant from the masts as circumstances will allow, and in any manner most secure and convenient. The lower ends of these copper rods to be fixed to the chains on the outside of the fore and aft shroud of each mast, and continued by broad and stout strips of copper to the copper sheathing of the vessel. The topmasts and rigging he proposed to protect in a similar manner, with inflexible rods, or flexible metallic ropes, and united at the lower ends with the first set. For the topgallant-masts he proposed adopting Mr. Harris' plan of strips of copper into grooves of the wood. Other minute details were suggested.—*See Annals of Electricity*, vol. 4, page 184. To avoid objections arising from the interference of the conductors thus confined to the working of the ship, Mr. Sturgeon subsequently changed the positions of them in part.

J. Murray, Esq., an electrician of note in Europe, and the inventor of the application for electric conductors of *hollow* copper tubes, consisting of gas piping, rendered continuous by connecting joints, and somewhat extensively used abroad for buildings, proposed an application of the like conductors to masts of vessels, made in the form of "flexible and sliding tubes, like those of a telescope, a provision readily adjusted to the case of a topmast, or topgallant-mast, when struck in a storm."—*Annals of Electricity*, vol. 3, page 65.

It will have probably struck the attention of the reader who commenced the perusal of this article with no preconceived and favorite theory explanatory of the laws that govern electric phenomena, as manifested either where an artificial conductor is or is not present to aid their development, that all the before described plans for marine conductors proceed upon the same theory that pertains to conductors affixed to buildings on the land in one particular, viz: that of conducting the electric current *down* from the clouds *above*, into the water *below*. No other thought seems to have interposed to suggest any variation from this theory; and yet, apart from the efficacy of artificial conductors to ward off the electric stroke, by receiving and conducting it away from the vessel, this *downward* direction of the force is the only point of common agreement among all the electricians whose plans have been cited.

Views no less dissimilar are entertained by the most eminent philosophers of the same and different countries, respecting the nature of electric action, the forces which produce it, whether it exists *per se*, or is the result of chemical agency. Some maintain that it combines the operations of two distinct forces, called vitreous and resinous; others that it consists of *one* only; others that it is independent of electric matter, and that all electric phenomena are the effects of rotatory or vibratory motions communicated to particles of common matter, on which they are displayed.

These antagonistical opinions have ran almost concurrently with the history of electric science from its early dawn. It is not my purpose, however, to attempt an analysis of the arguments on which either rests, nor to offer any solution or adjustment of them. I aspire to no such scientific eminence. I advert to their existence only to shield from the charge of *presumption* the idea I wish to advance, that, while the exact nature of the electric action remains in dispute, in respect to its primal constituency, a general misconception of the laws of one of its important phenomena *may be* still entertained, not unworthy of re-examination, and possibly of correction, viz: whether the electric force which affects vessels at sea, has its direction *upwards* to the clouds, or *downwards* to the water.

The seeming simplicity and uniformity of the evidence which furnishes the generally received answer to this query, which is the ocular demonstration made to observers by the *running* light or flash of the electric discharge, and which is rarely otherwise than *downward*, is not conclusive as to the correctness of that answer; but this may be *the very cause* of the long continuance of its error, even with philosophic minds.

In natural philosophy, nothing is more liable to be erroneous than our *first impressions*. For instance, who, at first thought, would not suppose the *hardness* of a substance would be proportionate to its *density*? and yet, we know that a diamond, the hardest substance in nature, has a specific gravity three times less than lead, which is so soft that it may be scratched by the finger nail. So, who would not, at first thought, suppose Indian rubber to be more *elastic* than glass? and yet, its elasticity is not comparable to that of the latter. So we say, at first thought, that lead is heavy and a feather is light, under the general notion that one is heavier than the other; whereas, the difference only arises from their difference in their surfaces upon the retarding air; and in a *vacuo*, the largest mass of lead, and the smallest feather, *would fall through equal*

spaces in equal times. So, at first thought, we are disinclined to believe that any body of matter once set in motion would continue to move *forever*, unless stopped by some exterior power. We are equally incredulous, that there is no such thing in nature *as solid matter*; that no two particles of matter, even in what we call *solid metal*, are in close contact. But *Newton* admits, and reason instructs us to believe, that “*atoms, even of the densest solid, are placed at distances from one another, infinitely greater than their own diameters.*”

I might multiply these illustrations, but will content myself with quoting the admonitory remark of one of the most distinguished philosophers of the day, that “it is no less necessary to test the accuracy of our notions derived from common observation and the first impression of our senses, than to guard against the careless adoption of ill understood generalization of the results of experiment in our after progress; and we must be particularly careful to correct the prejudices, which are but too apt to infect the mind from the first fountain of our knowledge.”—*Daniell's Study of Chemical Philosophy*, § 8.

From the tenor of these latter remarks, the reader will have inferred that the writer dissents from the generally received theory, that the electric force which affects destructively vessels at sea, *descends* from the clouds to the ocean, instead of *ascending*; and that the *running light*, or streak of the electric discharge, denotes the direction of the charge. Heretodox to the eyes of admitted science as it may appear, the reverse of these opinions constitute, in my mind, the preferable theory—a theory most consistent of any with the correct appreciation of the phenomena of the instances reported upon by Mr. Harris and Mr. Meriam, your first correspondent upon the subject.

Among the general facts derived from Mr. Harris' register of observations up to 1839, to which I would direct attention, are as follows. He says, “From about one hundred cases, the particulars of which have been ascertained, it appears that about *one-half* of the ships struck by lightning, are struck in the mainmast; *one-quarter* on the foremast; *one-twentieth* on the mizzenmast, and not more than *one in a hundred* on the bowsprit. About one ship in six is set on fire in some part of the *masts, sails, or rigging*. In these 100 cases, there are destroyed or damaged, 93 lower masts, principally line-of-battle ships and frigates, 83 topmasts, and 60 topgallant-masts.”

Mr. Sturgeon, who was contesting the efficacy of Mr. Harris' plan of conductors to guard against what the former alleged to be *lateral and oblique* discharges, remarks:—“By looking over the particulars of 174 cases, which Mr. Harris has collected, I find only 44 in which the topgallant-masts appear to have been injured; and as out of these 44 cases there are 13 in which the topgallant-masts were lost, broken or damaged, accidents probably occasioned by the mere falling of those masts when the others below them were struck, there would appear to be only about 31 cases out of the 174 in which the topgallant-masts have been absolutely struck by the lightning. It is probable, indeed, that the proportion is even *less* than this; because of these 31 cases there are 15 in which the topgallant-masts were shivered only, a species of damage which, if occurring near to the heel of the masts, might easily arise from lightning striking the ship no higher than the topmast head. Lightning striking the topsail yard arm, when that sail is set, or the cross-trees at other

times, would be very likely to damage the lower part of the topgallant-mast."—*Annals of Electricity*, vol. 4, pp. 172-3.

He again says :—"It appears from Mr. Harris' list of cases that the lower masts are more frequently injured than the topmasts, and the topmasts more frequently than the topgallant-masts ; hence, although the Rodney and some other ships have been struck *above* the topmast, *it is obvious*, that lightning more frequently strikes the rigging *below* the topmast head, than above it ; and by taking into account the damage done by the mere falling of the topgallant-mast, as a consequence of the masts below it being struck and injured, it is highly probable that the cases in which lightning strikes the spindle at, or above, the topgallant-mast head, bear a *very small proportion* to the cases in which lightning strikes the sides of the masts and yard arms."—*Ibid*, pp. 177-8.

I wish the reader to note, that Mr. Harris assigns no comparative number in his cases, to injuries occurring to the *hull* of vessels struck by lightning, particularly *below* the water level. The truth is, the instances of this kind are so rare, that *no general law has been attempted to be deduced from them by any person*. And yet, who can doubt that *this almost uniform exemption of the hull from the electric charge is due to some general law which has been singularly overlooked hitherto by electricians* ? Such a law, if to be found consistently with known laws of the electric action, cannot but open the door to yet higher and more perfect knowledge of this interesting science. I hope to be able, satisfactorily, to deduce and establish it, and in harmony with the theory advanced by me, that the direction of the electric forces affecting vessels at sea are *upwards*, and not *downwards* ; that, although instances of the latter kind may occur, *they are exceptions to the general law of electrical discharges upon the ocean*.

In all the details of Mr. Harris' cases that have come to my knowledge, there is not one decided case of the electric fluid having passed into the hold below the water level, *unless directed there by a metallic conductor*.

The nearest approaches to a statement or description of such a case by him, are the following :—

In a controversial letter of his to the editor of the Philosophic Magazine and Journal, in reply to an article by Mr. Sturgeon, this passage occurs :

"Mr. Sturgeon's assertion that a conductor on a ship's mast would operate on the magazine is therefore quite unwarranted. Besides, we have many instances of the masts *having been shivered by lightning into the step*, while acting as partial conductors, without any such consequence ; as happened to the Mignonne, in the West Indies, the Thetis at Rio, the Sweden, Gibraltar, Goliath, and many others."

The case of the Mignonne is thus given to Mr. Harris by Admiral Harker. After describing the appearance of the weather . . . "About midnight the heavens seemed to be one continued flame, and soon after the main topmast was shattered into probably fifty pieces, scattering the splinters in all directions ; *the mainmast was split down to the keelson*, and a sulphurous smell *came up from the hold*, which occasioned some to cry out that the ship was on fire. Two men were killed in the maintop, being burnt black, and having some splinters sticking in them ; and a man who was sleeping on the lower deck with his head on a bag, near the armorer's bench, was found dead, with one black speck in his side ; another man sleeping by him was not hurt."

In an article by Mr. Harris in 1832, copied from an Edinburgh journal by Silliman's Journal, vol. 21, p. 350, is the case of the French ship Conquin, struck while at anchor in the bay of Naples, thus given:—"The electric matter passed, in this case, close to the main hatchway, upon a spare anchor, and from thence through her bottom, a little below the water's edge, on the larboard side."

The next approximation to a case of this description, in all of Mr. Harris' cases I have seen, is that of the British naval ship Snake. The occurrence is thus detailed:—"The electric fluid entered main truck, shivered royal mast, splintered topgallant-mast, then over chain main topsail tye without damage, to within eight feet of the deck, so far as the topsail halliards. Finding an obstruction here in the ropes, it again severed on the mast, and became divided on the saddle of main boom; one portion passed out of quarter deck port to the sea, the other to lower deck and down the mast, and distributing itself on the hull, affecting persons below. The mast, on being examined at Halifax, was sprung about the partners, two inches deep and fifteen inches round, was perfectly burst asunder at the step, hence the stock had extended to the keel; the electric matter, consequently, must have passed by the metallic bolts in the keelson to the sea."

The next and last approximation of a case of the nature under remark, was "that of H. M. ship Hyacinth, which had both the fore and main topmasts and topgallant-masts destroyed by lightning in the Indian ocean, in 1833. The electric fluid shivered those masts from the truck to the heel of the topmast, where it became assisted by the chain topsail sheet leading to the deck, and so did no further damage to the mast; thence it received assistance from the copper pipe of Hearte's patent pump, leading to a small well, and thence by a second pipe through the ship's side under water, and by this passed safely into the sea."

If the reader will now turn to Mr. Meriam's article in your Magazine of June, 1846, he will see the details of about fifty cases, in not one of which is the evidence to be found, that there exists *any general law that admits* of the electric current manifesting itself below the water level of a vessel struck by lightning on the water. It is only necessary for the anxious student of electric phenomena to criticise the reported cases, to become satisfied, that wherever the lightning descends below the water level in a ship, it furnishes an *exception* to the general law of its course, and is conducted by a foreign influence that overpowers the law, and establishes an exception. He will find numerous instances of its reported descent with destructive violence to all in its way, until within a few feet of the water, and there leaving the masts to leap overboard. In the famous case of the packet ship New York, the lightning "struck her main royal mast, burst asunder three stout iron hoops with which it was bound, and shattered the mast head and caps. It passed down the mainmast, one branch entered a store room and demolished the bulk heads and fittings; thence it went into the cabin, and, conducted by a lead pipe, passed out through the ship's side, between wind and water, starting the ends of three five inch planks."—Silliman's Journal, vol. 37, p. 320. In vol. 21, p. 351, the other branch of the fluid is described as having "passed into one of the cabins, and shivered to atoms the plate of a large mirror without hurting the frame; after this it fell upon a piano-forte, which it touched with no very delicate hand, and left it dismounted and out of tune;

hence it passed through the whole length of the cabin floor, which jumped at the time, and out of the stern windows into the sea." bringing more directly to the reader's view the general direction which it is described as taking, we will recount a few cases, as fair exposure of all. He will observe, also, how distinctly it is traced and often strikes downward.

No. 830, the *Athol*, of 28 guns, was struck by lightning. "At this time the topsails were lowered upon the caps, and the other sails furled. The ship had chains for hoisting topsails, which lay in the direction of the masts; also a chain for topsail sheets, which led along the lower

When the electrical explosion fell on the truck, it shivered the lantern-masts into pieces so far as the commencement of the first chain; being assisted by the chain, it passed on without damage to the topmast where the chain terminated, thence with damage over the head of the mast, until, being assisted by the lower chain, it passed without damage over the deck; on reaching the deck, it passed, by means of a bolt through a in the fore-castle, upon the chain cable, and thence into the sea."

No. 811, the brig *Belleisle*, of Liverpool, was struck. "A vivid flash of lightning shivered her fore topmast and foremast, tore up the fore-castle and struck a hole throughout her starboard side, starting several of the bends, where it passed into the sea."

The United States ship *Amphion* was struck in 1822. "The lightning struck by her mizzenmast, destroyed the compasses and cabin furniture, splintered and tore into pieces the ceiling, bulkheads and rudder, shivered two hold beams, and passed out through the quarter into the sea, tearing off part of the sheathing in its course."

A great accumulation and intensity of the charge that struck H. Rodney, on the 7th of December, 1838, eight or ten leagues to the westward of Cape Passaro, and the minuteness of details of the occurrence furnished, will serve as an illustration of a greater variety of phenomena than any other case on record. And although it be long, it is worth a repetition here, and will complete the data of observed facts for an illustration of the theory I adduce.

In *Annals of Electricity*, vol. 4, p. 167 and seq.—"Progressive of the electric fluid.—The vane staff, which is six feet long, with a spindle (on which the vane traverses) of about 10 inches in length, mounted by a gilt wooden ball, the size of an orange, shows its first (the ball and spindle were never seen after the shock,) being split and broken, and one side of it blackened; the copper binder round the neck was burst asunder, a small piece broken out of the truck, and the metal sheaves for signal halyards slightly fused. From this, saving the royal pole uninjured, it appears to have passed inside the upper funnel for topgallant rigging and iron hoop of the hounds of the mast, shivering the topgallant-mast to atoms, from thence to the topmast, not a piece having been seen the size of a common walking stick and the sea was literally covered with its splinters to a considerable

Its marks are now lost for many feet, notwithstanding the shock this spot must have been most terrific, as it was in the topmast rees where the poor fellows who suffered were at the time, and also of the topmast (which was not at all injured below the cap) was upwards into the cap, the fid being raised about eight inches above the rees-trees with such force that the top burton block stop was car-

ried away in trying to house it down again, and after all were obliged to cut it out, not being able to clear it in any other way. Its next appearance is on the main topmast, ten feet above the cap, seemingly attracted by the iron-bound tye blocks and iron hoops on the topsail yard, (being under a treble reefed topsail,) from whence it rent an immense splinter out of the mast down to the lower cap, going nearly into the core of the mast, and set fire to the tarry and greasy gear about the bunt of the topsail yard, after taking this large splinter of nearly one quarter of the substance of the mast away. Its next positive mark is on the starboard lower trussel-tree, the lower cap, head of lower mast, and heel of topmast (both iron hooped) having escaped unhurt. It shook and blackened the trussel-tree, rendering it unserviceable, and then must have entered the mainmast, spreading and passing down both sides, bursting thirteen of the large iron hoops in its course, and knocking out pieces of the side trees and main stick in several places, and *escaped from the mast in the shape of a fire ball, seven feet above the deck, and was seen to go over the starboard (leeward) netting right over the gun abreast of the mainmast*, rending the hammock cloth in several places, carrying away one rattlin and stranding another. Its exit, although fiery in appearance, was harmless in effect, merely injuring the cloth over a space of about a foot, and breaking the two rattlins, *when it was seen to strike the water a short distance from the ship.*

"Effects of the electric fluid in its course.—Knocked overboard (at least they were never picked up or seen) the gilt ball, copper spindle, and calico vane from the top of the vane staff—split the vane staff—broke the copper binder round the truck—broke a piece out of truck, and slightly fused one of the metal sheaves for signal halyards—cleared away the whole of the main topgallant-mast from the hounds of topgallant rigging to the topmast cap, not leaving a fragment aloft. Four men who had been sent aloft to unbend topgallant gear, and prepare for sending the yard down, were in the cross-trees at the time. John Rowe was struck dead as he was moving from the weather to the lee side of the mast for shelter from the rain; he was just on the aft side of the mast at the moment, and fell astride the after cross-tree, where he was held by some ropes falling round him. He never spoke. Thomas Hollingsworth was standing on the after shroud of topgallant rigging, to leeward of the mast, and holding on by the after cross-tree. He was so seriously injured as to be sent down in a chair, and died in seven hours after. Hugh Wilson was standing on the foremost shroud of topgallant rigging, holding on by foremost cross-tree, and close to Hollingsworth. He states that the shock threw him forward, and Hollingsworth aft. He was only slightly hurt, and only two or three days in the doctor's list. The other man, Charles Prynn, was to windward, standing on the cross-tree, holding on by the foremost shroud of topgallant rigging, and received so slight a shock that he did not even apply to the doctor. Wilson heard no thunder. The first-named two men had every stitch of clothes burnt from their bodies, excepting just the wristbands and lower parts of the trousers, which was left on the wrists and ankles. They presented a shocking spectacle; their bodies discolored and hair singed from their persons. The next place is a large splinter out of the main topmast, from ten feet above down to the cap, setting fire to the gear about the topsail yard, and then commences its destructive force about the mainmast, first of all giving a severe shake

o the starboard lower trussel-tree. It is hardly possible to give a description of its effects on the mainmast; the mast should be seen fully to understand it; but some idea may be formed when it is stated that out of twenty-eight large iron hoops, five inches wide and half an inch thick, between the deck and trussel-trees, thirteen were burst asunder, and that for a space of fifty-three feet its ravaging effects can be traced the whole way, and the spot whence it made its final escape is several inches deep in the mast. On the starboard side a large piece of the mast is broken out (six inches deep) from the third to the sixth hoop above the deck, and from the eighth to the ninth hoops. The cheek or side tree, several feet of the lower part gone altogether, and the other part nearly shook all to pieces. The larboard side ekin piece gone from the sixth to the eleventh hoop, and the mast burst out from the ninth to the eleventh, and from the thirteenth to the fifteenth, and the cheek very much shook. The hoops carried away were mostly the clasp hoops of side trees, but some of the body hoops were also burst asunder, and *strange to say*, the awning hoop in which the main trysail mast steps and mizzen stays reeve, lost one of its forelocks, notwithstanding a piece of copper had been nailed over the clasp part, *the forelock which was driven downwards was gone*, with a piece of copper, and never seen, while *the one which drives upwards was left in its place*, and held the hoop together. There were eighteen body hoops between the deck and trussel-trees, and ten clasp hoops round side trees—four of the body hoops below side trees were broken. None of the hoops on the head of lower mast, or on the head of the topmast were touched.

"Several men assert, that *balls of fire were running about the lower deck, and that they ran after them to throw them overboard*. This seems strange; but if so, and it is hardly possible several could be deceived, it could be nothing more than flashes or rather sparks passing down the different hatchways after the explosion, and less active than in the first descent; at all events, it is certain there was a strong sulphurous smell below, particularly in the pump well, and sparks seen by many of the officers. It is remarkable that the electric fluid seems to have jumped from metal to metal; first the copper spindle, then the copper funnel of topgallant rigging, and iron hoop round the mast to the head of the topmast, from thence to the iron-bound blocks and hoops on the topsail yards to the main cap, and then to the lower trussel-trees, taking all the hoops downwards, passing over a gun into the sea.

"The mast has since been taken to pieces at the naval yard at Malta, and its interior shows no defect, in fact; not the slightest injury appears about the mast, except what was exteriorly displayed. It is marked in some places, even on the spindle, (centre piece,) as if a train of powder had been flashed on it, but nothing more."

In another paper I will present the deductions which result from the data given in the present article, and from acknowledged principles of electrical matter, in exposition of the new theory of the electric action upon vessels upon the water, which I have herein advanced. It may at least serve the good purpose of exciting more careful observation of this class of phenomena, so important to be thoroughly understood for the preservation of life and protection of property, however erroneous my theory may in itself be hereafter proved.

FRANCIS O. J. SMITH.

FOREST HOME, near Portland, Me., Jan. 2, 1849.

ART. IV.—FRIENDLY SOCIETIES:

WITH REFERENCE TO ANNUITIES AND LIFE ASSURANCE FOR THE POOR.

THERE are few institutions capable of being more generally useful, and to produce more real relief, than friendly societies, provided they are based on correct principles, and are conducted with zeal, prudence, and economy. They are particularly so to the laboring classes, in averting, by their own efforts, the misery which poverty adds to the bed of sickness, to the infirmities of age, and to the hour of death. These advantages are greatly enhanced in value, by the consciousness that they are the fruit, not of benevolence or the charity of others, but of the members' own frugality and foresight. Indeed, few things can be conceived more gratifying than the enjoyment of benefits which are the result of our own doing. It raises us in our own estimation—it makes us feel that we are of some value in society—that we contribute to its welfare by our labor, without being burdens upon it in our misfortunes.

Frugality and prudence, in preparing for the future, give to a man a moral independence and a happiness, of which a mere pauper can scarcely form an idea. A man with such habits is a better husband, a better father, a better servant; he is therefore more likely than others to be employed where confidence is required; his services will be more productive to himself and more valuable to others. He will find more pleasure in the midst of his family, because he knows that he has done his duty to them, and consequently has a right to look for their approbation.

Unfortunately, however, unsound calculation, bad management, and even fraud, too often have been the cause of thwarting the good intentions of these institutions. Starting with members in the prime of life, the claims are in the beginning but few, inducing a belief of prosperity, the funds increasing wonderfully in appearance; but in the course of a few years, with advancing age, sickness gradually increases, claims for funeral money come in oftener, and it is at last found that the contributions have not been adequate; that benefits have been promised which can never be realized, and that ruin and disappointment are inevitable.

The first object must be *security*. This can only be obtained by following the mathematical rules which are so well established by intelligent men, and the fruits of the experience made by others, and which have been published by order of the British government. The second object must be *justice*, in charging to each member neither more nor less than the true proportion of risk which he brings into the society, taking into careful consideration his age, and the probability of the amount of claims he may have to make. Too little attention is paid to this in the numerous benevolent societies in which provisions are made in cases of sickness, and much less to the probabilities of paying funeral money for himself or wife.

McCulloch (who stated that from the 1st of January, 1793, to the commencement of 1832, no fewer than 19,763 friendly societies were enrolled, of which 16,596 were in England, 769 in Wales, 2,144 in Scotland, and 274 in Ireland) remarks:—"It should also be recollected that the progress of these societies, though great and most honorable to the laboring population of Great Britain, has been not a little counteracted

by the ignorance and mismanagement of their officers, and by the real difficulty of establishing them on a secure foundation. The great error has consisted in their fixing too high a scale of allowances. At their first institution they are necessarily composed of members in the prime of life; there is, therefore, comparatively little sickness and mortality among them. In consequence, their funds rapidly accumulate, and they are naturally tempted to give too large an allowance to those members who are occasionally incapacitated. But the circumstances under which the society is placed at an advanced period are materially different. Sickness and mortality are then comparatively prevalent. The contributions to the fund decline at the time that the outgoings increase; and it has not unfrequently happened that the society has become altogether bankrupt, and that the oldest members have been left, at the close of a long life, destitute of all support from a fund on which they had relied, and to which they had largely contributed."

The rapid and extraordinary increase of friendly societies in Great Britain attracted the attention of the House of Commons, and a select committee was appointed, whose reports in 1825 and 1827 prepared the way for the passing of several acts, establishing certain rules and regulations, to which all societies have to conform. Every effort has been made by the said committee, and by the Society for the Diffusion of Useful Knowledge, to procure the best materials by which the chances of sickness and of life could be accurately ascertained; and with the assistance of highly intelligent men, tables have been computed, which show the contributions required in single, annual, or monthly payments, to secure benefits of various descriptions. The benefits granted by friendly societies are—

1st. An allowance of a certain weekly sum during sickness in proportion to the single, annual, or monthly contribution, to cease on arriving at a certain age.

2d. The payment of a weekly sum on arriving at that age, and to be continued until death, whether he be in good or bad health.

3d. The payment of a certain sum on his death.

4th. Every member is entitled to medical advice and medicine from the physician employed by the society.

The first of these benefits is well known in this country, and practiced by our Health Insurance Companies, and by various benevolent societies; though I fear that mathematical principles and the true chances of sickness, in proportion to age and other circumstances, are but seldom observed, and that the errors above alluded to have in many cases been committed, and must eventually lead to the same disappointment, notwithstanding the apparent success of which they may now, in their infancy, boast.

How important it is to charge each member in due proportion to the average risk he brings to the society, will appear from the tables established by the experience of the English friendly societies, (see Ansell's *Treatise on Friendly Societies*,) showing the quantity of sickness experienced by an individual in the year following each age, expressed in weeks and decimals of a week, and the single and annual contributions required to obtain £1 a week during sickness, until the age of 70.

INTEREST 4 PER CENT.

AGES.	20.	30.	40.	45.	50.	55.	60.	65.	70.
Weeks...	.776	.861	1.111	1.351	1.701	2.256	3.292	5.679	10.086
Single...	£21.69	£24.85	£29.53	£32.26	£34.91	£37.01	£37.25	£30.73	£22.89
Annual..	1.22	1.56	2.16	2.62	3.24	4.12	5.44	7.54	9.80

The observations not having extended beyond the age of 70, no calculations could be made on the value of a weekly allowance in sickness after that age; the English societies, therefore, limit it to that period; but, instead of it, make a constant allowance from that time until death, the expectation of life being known. It is, therefore, a deferred annuity, for which a separate charge is made, and may be fixed so as to commence at 60 or 65. Another extra charge is also made for the sum to be paid at death, which is equal to a life assurance. The annual and monthly contributions are so calculated that they cease as soon as the annuity commences. A single payment entitles the member to all these benefits without any further payments.

It will be seen that these calculations are based upon true mathematical principles; that they extend only as far as actual experience has furnished data to measure the risk; and that each party is charged just as much as he will cost the society, on an average scale.

The great error made by our benevolent societies is, that they put no limit to the time for which the allowance for sickness is to be paid; and if a member lives to an age in which disease takes place more frequently, he will become the recipient of benefits for which he has given no equivalent, and will therefore be a burden to the society to which he belongs.

Another mistake is, that safety is expected in the accession of new members, who, being younger, sustain the funds in proper order, and make up for any deficiencies caused by the older members. This is true enough, but it is at their expense; for it is evident that if the fund is not sufficient to warrant the promised benefits, the new comer will have to pay not only to obtain the same advantages, but something extra to cover the losses by former members. Supposing a society composed of 200 members, and which has been in existence for the space of ten years, without admitting other individuals; that it is found, that in consequence of inadequate contributions, or by greater claims upon their funds than anticipated, their treasury is exhausted, or at least deficient, and are therefore unable to continue the same allowances; they conclude to admit more members, so that their higher initiation fees may restore their funds to their proper level. Now it is very clear that if the same amount of contributions has not been sufficient for the old members, it cannot be enough for the new ones; and if they are charged at a higher rate, it is in order to make up the deficiency caused by the former, and is therefore a manifest injustice to the latter.

Had no others joined, the society would have gradually expired, proving that the members had not contributed enough, and that, therefore, new ones were required to make up the loss; but as these will in the course of time be in the same situation, more new members will be wanted. Insolvency will not be avoided, but postponed, and the amount of deficiency constantly increased; like the merchant, who, finding himself behind in his affairs, avails himself of his credit to increase his purchases and debts; he holds himself up for a little time longer, but the day of

reckoning will at last come, and it will be so much more awful in its consequences.

The principle upon which friendly societies are founded, is to overcome the effect of fluctuations to which every individual is exposed. Taking a great number of them together in their collective capacity, the quantity of sickness and the expectation of life for each respective age has been as nearly as possible ascertained, and an average rate has been established for each. Some, of course, will be sick much oftener than others; but who will be so, cannot be told beforehand, because all have been considered equally healthy, otherwise they would not be admitted into the society.

By the example already given, it will be seen that a man of the age of 30 will experience, on an average, $\frac{1}{4}$ part of a week sickness during the year, while one of 50 years will have $1\frac{1}{4}$ week; and a society may expect to have to pay in that proportion of allowances during the following year. In a small society, it is impossible that this should be exactly the case, but the larger the number is, the nearer will be the average; and it is particularly desirable that an association should be quite numerous, if it is expected that the principle should work well. For this reason, friendly societies as they are established in England, will answer much better than our secret societies; because, if these should have as many members, as the others may have without the least inconvenience, their management would become exceedingly difficult, and for many reasons impracticable.

The members or subscribers to a friendly society are not required to attend any meetings, as they may send their monthly dues to the person authorized to receive them, and females may therefore become members as well as males.

The managers alone have certain days fixed on which they meet to transact business, and a general meeting only takes place once a year, to make a report to those who choose to attend it. There are, therefore, no rents to pay, except for a small room for the officers, in a central part, to be used once a week; no ornaments, banners, furniture, &c., to provide, and the whole expense consists in a moderate salary to one or more of those officers whose duties are too onerous to be obtained entirely gratuitously, and for some stationery. The duties of directors, trustees, &c., are so light, that public spirited men will be found in abundance to take charge of them; who will readily devote a few hours every month to it, and which is all that is wanted.

The object of friendly societies goes far beyond the advantages obtained in other benevolent societies and health assurance companies, because they provide not only for the sick, but also for the aged. In fact, what have the industrious most to fear?

1st. To be incapacitated to earn their daily bread by sickness—here the society steps in, to supply the food for his family, and to assist him with medical advice and medicine.

2d. To be unable to support himself any longer by work, on account of old age, and weakness of body and mind accompanying it—when the society provides him with a certain income until his death.

3d. To leave a family unprovided for—when the life assurance, or the sum to be paid at death, will be found a welcome assistance.

All these advantages are secured by a small monthly contribution.

made while he still was able to provide for himself, and which will cease just at the period when his strength and energy will begin to fail.

To give a clearer insight into the internal machinery of these societies, I offer some extracts from a work of the Rev. John Thomas Becher, entitled the "Constitution of Friendly Societies upon legal and scientific principles, exemplified by the rules and tables of the Southwell Friendly Institution, &c.," and hope that they may lead to the establishment of a similar association in this country, based upon truly safe and equitable principles. The above society is composed of—

Honorary members, contributing by benefaction £2 each, or by annual subscription at least five shillings. Ladies being also admitted at one-half of the above contribution.

Ordinary members, being the regular contributors or subscribers for the benefits.

The management is entrusted to twenty-four directors, including a patron, a vice-patron, a president, two vice-presidents, eight trustees, and a treasurer, and who are chosen out of the male honorary members. Three directors form the board of management, and meet once a week for the transaction of business. There are besides four stewards, chosen out of the ordinary members, to investigate and ascertain in their behalf the state of the funds and the management of the institution, and to submit for the consideration of the directors and trustees such observations or suggestions as they may deem calculated to promote the welfare of the institution.

An honorary physician, or more, are nominated, if such can be found willing to give advice gratuitously to such members of the institution as may be recommended in writing by the secretary, or by the surgeon in attendance.

One or more surgeons are appointed, who, on the application of any person who may become a candidate for admission, are to ascertain and certify in writing the state of his or her health. They are also to visit every sick member entitled to medical attendance once, at least, in every week, or at such other times as the board or the secretary may deem necessary. They are to record the date of their attendance on the sick paper of every member demanding pay in sickness, and to afford medical attendance, advice, and medicines, as often as needful, to every member entitled thereto.

Voluntary male and female visitors, of whom respectively one-half are honorary and one-half ordinary members, are appointed to visit, from time to time, all sick or infirm members of their own sex, to certify their condition weekly to the secretary, to convey to them, severally, their allowance, and to superintend the application of the same on behalf of every member who may be incapable of so doing. Stipendiary visitors may also be employed, if voluntary ones are not found willing to officiate.

The secretary keeps all the accounts and registers, receives proposals for admission and demands for allowance, collects the monthly contributions and fines, and pays such sums as the members may severally be entitled to claim.

Salaries are only paid to the secretary, the surgeons, the stewards, and to the stipendiary visitors. The institution grants the following benefits:—

1st. An allowance in sickness, denominated full pay, half pay, (sometimes called bed-laying and walking pay,) and quarter pay. The full pay

every member who is confined by sickness or infirmity to his or her bed-chamber, so long as he or she continues unable to walk in a house, or to perform any work, or to execute any employment, in any manner his or her customary occupation. Half-pay to every sick or infirm member who is able to walk out of the institution to perform any work, or to execute any employment; but not so long as any one week, thereby to earn any sum, or to acquire any sum not equal in amount or value to his or her weekly half pay. Quarters due to every member during any sickness or infirmity which render him or her to weekly pay, and which shall have been certified by a surgeon acting in behalf of the institution to be incurable; but neither full pay nor the half pay shall be reduced to quarter pay until the expiration of twenty-six weeks.

Assurance of weekly pay in sickness entitles the member to require from the surgeon, at the expense of the institution, medical attendance, advice and medicines.

Annuities to commence on arriving at the age of 65 or 70, in week-maintenance, for the term of his or her natural life.

The payment of a certain sum on death, not exceeding, however, of £100.

Every member who makes an assurance in sickness, must at the same time assure himself after the age of 65 or 70, together with a payment on death; a combination has been devised with an intention of preventing immorality or inequality. Thus, were a sickly person to effect an assurance, the sum gained in sickness would be lost in the annuity. On the other hand, the healthy members receive but a small proportion of the benefit of sickness, there is a greater probability of their living to enjoy the benefit. By a similar arrangement, the annuities and the assurances reciprocally co-operate, so that, by introducing a system of balances, it seems scarcely possible to defraud the institution, or to the attainment of its benevolent objects.

Members are divided into ten classes, and every person may select the class to which he or she is desirous of belonging, but not so as to receive any weekly allowance in sickness, unless it shall appear that the weekly earnings of his or her weekly earnings or emolument, calculated or estimated upon an average for the year preceding his or her admission, has not been equal to thrice the amount of the weekly half pay of the class chosen. The table of the first class is assumed as unity; the tables of the other classes are found by multiplying their numbers with the amount of the weekly half pay of the first class. In the second class, the contributions and allowances are therefore double; in the third class, three times; in the fourth, four times; and so on, leaving it optional to every one to select the class which best answers his or her means or wishes.

Contributions may be paid monthly until the period when the annuities commence, when they entirely cease, though the benefits still continue; they may be paid in a single sum, which exonerates the member from any further payments. The institution grants likewise, upon admission, an allowance in sickness—

Annuities, to commence at the age of 60, not exceeding, however, 10 shillings a week; but another annuity of additional ten shillings is added, to commence at 65; and still another of ten shillings, to commence at 70, making in all thirty shillings a week.

5th. A life assurance not exceeding £500 on any one life.

6th. Endowments for children of from £6 to £30, payable on their arriving at the age of 14 or 21.

If desired, they may be made payable annually, from the age of 14 to 21, in the proportion of £1 a year for every £7, payable at 21.

7th. Medical attendance, advice and medicines, may be secured without an assurance in sickness, by agreeing to pay a certain single or annual contribution.

The work from which these extracts are taken, contains a very detailed explanation of the management, of the simplest method for keeping the accounts, and for ascertaining periodically the situation and progress of the society, with the various forms of applications, certificates, &c., with the aid of which no difficulty would be experienced in forming a society in this country. The tables therein contained, and those found in Ansell's *Treatise on Friendly Societies*, furnish the rules and materials for the computation of rates more suitable for this country, the higher value of money permitting a reform in the same.

The following table will show the contributions required by the Southwell Friendly Society, payable in a single sum or in monthly payments until the age of 65, for a weekly allowance of two shillings, (sterling,) full pay, and one shilling, half pay in sickness; an annuity of two shillings a week, after the age of 65, and the payment of £2 on death. Class No. I.

	16.	25.	30.	35.	40.	45.	50.
In sickness.....	£1 18 9	£2 2 6	£2 4 8	£2 6 1	£2 8 0	£2 9 5	£2 11 9
After 65.....	1 3 4	1 17 1	2 7 7	3 1 6	4 0 3	5 6 4	7 3 2
On death.....	0 14 4	0 16 5	0 17 5	0 18 7	0 19 10	1 1 3	1 2 9
Total single pay't.	£3 16 5	£4 16 0	£5 9 8	£6 6 2	£7 8 1	£8 17 0	£10 17 8
In sickness.....	£0 0 2	0 0 2½	0 0 2½	0 0 3½	0 0 3½	0 0 4½	0 0 5½
After 65.....	0 0 1½	0 0 2½	0 0 3½	0 0 4½	0 0 6½	0 0 9½	0 1 3½
On death.....	0 0 1	0 0 1½	0 0 1½	0 0 1½	0 0 1½	0 0 2	0 0 2½
Total monthly.....	£0 0 4½	0 0 6	0 0 7½	0 0 9½	0 0 11½	0 1 4	0 1 11½

It will be seen that a man aged 35 secures the above benefits by paying £6 6s. 2d. in one sum, without further payments, or by paying monthly 9½ pence until he reaches the age of 65, when all contributions cease, though he is still entitled to the benefits.

At the above rates, reduced into federal money, a weekly allowance of \$5 full pay, or \$2½ half pay in sickness, a weekly annuity of \$5 after the age of 65, and a payment of \$100 on death, would cost—

	20.	30.	40.	50.
In sickness.....	\$101 74	\$111 57	\$119 86	\$129 21
After 65.....	145 63	237 77	401 23	715 68
On death.....	38 64	43 54	49 61	56 84
Total in a single sum.....	\$286 01	\$392 88	\$570 70	\$901 73
In sickness.....	\$0 50	\$0 61	\$0 78	\$1 13
After 65.....	0 71	1 32	2 67	6 54
On death.....	0 19	0 24	0 33	0 52
Total monthly.....	\$1 40	\$2 17	\$3 78	\$8 19

In the above calculations, the interest is computed at 3½ per cent only;

at 5 per cent, which we could safely allow in this country, the above rates would be materially reduced, but to what extent, I have not yet ascertained, it being an undertaking of great labor to calculate the values of annuities, though I often intended to prepare such a table, which might prove an interesting guide to our numerous Odd Fellow, Temperance, and other benevolent associations, and prevent the danger of doing injustice to themselves, or of jeopardizing their existence.

Many might think that the management of such a society would be very difficult, and involve much labor; but referring to Mr. Becher's work, I find that there is only one meeting in every year of the honorary members, one every month of the trustees, and one a week of the board of directors.

Most and nearly all the work devolves upon the secretary, who keeps the correspondence and all the books, which are, however, much more simple than we might perhaps imagine. He, with the assistance of the stewards, has to attend one afternoon of each week to receive applications for admission, claims for allowances, and the monthly contributions.

There being scarcely any expenses—no rents for handsome offices, and heavy salaries to officers, no per centage need be added to the actual cost of the granted benefits; the poor and industrious members receive them, therefore, not only on the very lowest terms, but also in easy instalments. Females, who cannot become members of secret societies, and who would dislike to apply at our health assurance offices, are thus enabled to participate likewise in these advantages.

The subject certainly deserves the full attention of our philanthropists, and should it receive it, as I confidently hope it will, it would afford me the greatest satisfaction to lend my gratuitous aid, and to furnish further details and calculations, which it would be superfluous to give in this communication, and encroach upon the limited space allotted in this valuable Magazine.

J. F. E.

Art. V.—THE NEW YORK BANK BILL OF THE SESSION OF 1848.

It was a remark of the celebrated and illustrious George Canning, that in contradiction of the popular opinion, if there were any two things especially that he distrusted, it was facts and figures. No one can study with attention the history of the banking system of the State of New York, without conceding to Canning's maxim more of wisdom than would at first appear its due. He will find an array of statistics, supported by grave and elaborate calculations, careful deductions, and innumerable problems, all displayed by the advocate of peculiar systems of banking; and to these arithmetical displays, the testimony of valuable names added, and each in its day believed to be the result, the great result, desired, and for which others had in vain long labored. Yet time and experience, that go through this world of ours, discovering the truth where men had forgotten or omitted to search for it, and proving the futility of the clearest calculations, have demonstrated often that what was best supported by the statistics of the past, failed first for the future; and that the first break in financial machinery was frequently in the very place on which a wealth

of guard and restraint, check and balance, rule and regulation, had been lavished.

On no theme has there been so much of theory poured out, as on the banking system. It has been the study of the merchant and the legitimate banker, and in their hands it has, as business usually does in the guidance of business men, prospered. It has been the nucleus of a library of essays, all striving to exhibit their profound knowledge on the question, by going all around it—everywhere but *at* it. Chiefly it has occupied the attention of legislative wisdom, and when committed, as it has often been, to the care of the men who knew but little of the practical operations of banking, it created plans and projects which would have crushed or crippled the very business which it was designed they should benefit.

All this time it has been forgotten that in all business operations, simplicity is a cherished feature, and that whatever is complex, is a departure from the right; and for years it has been proclaimed as an axiom, that the business of banking was one clothed in mystery—a very delicate machine, in which much of lever and pinion on wheel was necessary, and that no rude hand must be laid on the structure.

The State of New York took banking in “the natural way.” It did not come in in a storm of experiment, but monied institutions were here and there organized, where the wants of the business people required. In the great city, it, of course, first developed itself, because there, amid the perplexing and complex turns of the wheel of commerce, it was first manifested that money needed a place of bargain and sale as necessarily as any of the great staples of trade. A regular and quiet institution that was which first exhibited to the citizens of the metropolis the order and method of a banking-house. It had some customs which would now be considered quaint indeed, and rather ludicrous, but which then seemed to be only an exhibition of the obliging character of the new “fiscal agent.” It was a pleasant sight to see the old porter of the bank taking round each note, as it became due, to the parties liable, so that, instead of, as now, hurrying to and through Wall-street, before the fatal hour of three shall have struck its death blow to credit, the note was sure to be brought home, literally, perhaps, a more welcome visitor than now.

A similar simplicity of manner pervaded the customs of the old Bank of Albany, which was for so long a frontier institution—an outpost of finance. Their business was always peaceably done, and no rash ventures were made. There was a caution as to credit, and a horror as to debt. It watched its own notes quite as warily as those of its customers, and was, in all the community, a synonyme for prudence. The men associated with these two pioneer banks lingered long among us, as if the business had been a pleasant one, and conducive to longevity. The writer of this sketch held an interesting interview with one of these old gentlemen but a few months since, when he pointed out, in State-street, the locality where he had seen a treaty held with some of the Iroquois by the colonial governor, prior to the Revolution. The life of any man is short, yet the existence of these early financiers has been long enough to witness successive mutations in systems of banking, each in their commencement heralded as the very surest and safest; certain remedies for all the ills to which credit and currency are heirs, and each in turn inspected, attacked, and denounced—the adulation of the morning changed in the evening to invective.

It has been a misfortune in the history of the banking system in this State, that an *ad captandum* name has generally been fixed upon the projects submitted to the action of the community, so that the appellation has sometimes been oftener a reliance than the intrinsic worth of the policy. A *Safety Fund*, a *Free Banking Law*, pronounce their own eulogy in their designation, and anticipate favor, rather than earn it.

The rule to which the community agree in most of the departments of life, is departed from too often, in reference to banks. Excellent men—good lawyers, it may be, or skilful physicians—admirable artisans, sagacious politicians, have been the compilers, devisers, inventors of a bank law, and of statutes governing and regulating the transactions with the currency. The legislature has not always chosen from among its number those best qualified by experience, by practical knowledge, to judge of what system of banking would be surest and safest. It is from the merchant, whose interests are identified with a sound and authentic circulation—the banker, who has passed a lifetime in finance as a business, that the best suggestions and views must necessarily be obtained; and stating this, is only bringing the laws governing money to the same guidance which would be given to any other science or profession. The wants of business, and only those, make the necessity for a bank; and business men know best what is likely to do all that ought to be done, and to do that well.

It is not for me to undertake the difficult task of a decision, as to what system of banking for our State is best. The judgment of the people through their representatives will undoubtedly be a wise one; at least, it is most comfortable to indulge such a hope. It is fortunate that the commercial interests of New York are so firm founded and durable that not even a succession of novelties in finance can seriously injure them.

We are approaching a crisis or an era in our banking, for the provisions of the constitution are paramount, and with the new rule compliance must be made.

The subject was examined in the last session of the legislature by a practical banker, who was at the head of the Committee on Banks. He had for a series of years managed an institution, and with results that demonstrated the efficiency of the laborer. His bank had furnished a currency always sound, and ready to be rendered into the precious metals. The community in which the bank was situated, its customers and its stockholders, bore willing witness to the good sense and good judgment which had characterized its conduct. Mr. Ayrault discussed the subjects committed by the Senate to his care with ready directness of purpose, regarding banking as a business interest, in which every citizen could look without machinery or mystery. The doctrine was well stated in the Report:—

“On no question before the public judgment, has there been greater errors of extremes of opinion, so far apart, and so strenuously advocated, that the true theory, the sound decision, has been often among the things most difficult to be attained. It has been vehemently asserted, that all banking was a monopoly, given to the few against the rights of the many, and that that government alone had advanced far in the progress of preservation of the happiness and prosperity of the people, which most discouraged and opposed this pursuit. And by the side of this error, grew up its antagonist, holding a doctrine utterly the reverse, and contending for the giving and the granting of privileges and exceptions, and fran-

chises, inconsistent with that equality and simplicity which is essential in the institutions under which it is our happiness to live.

"Banks and banking are conveniences of business which are to be regulated by the well established common sense practical rules which govern an honest intercourse among men in all the pursuits of trade, and commerce, and labor; that there is to be neither mystery or privilege about them, but that their duties are just as clearly defined and definable as those of any other business in life, and that, when acting within these regulated limits, they are valuable instruments of the movements of society; but that, whenever more than this is asked or attempted, and they are thrown into the combat of political or personal strife, they become obnoxious, and are worthy of the disapprobation of the people, expressed through their laws."

This is such a thorough view of the subject as will meet, and did meet, a response in the minds of the people, for it was new language in the legislative halls—indeed, it was breaking away at once from the confused and entangled methods of other days, and it proved that progress was as much an attribute of financial knowledge, as of political or scientific. The very best kind of progress is that which is simple and substantial.

The bill which accompanied the report, and which was examined and debated by the Senate for several days, was intended, in an enlightened good faith, to present to the capital of the State, already engaged, or willing to embark in the business of banking, the means so to do with sufficient facilities for all just and honorable enterprises, but guarded doubly strong against being made a vehicle of fraud or dishonesty.

Its provisions looked to a valid payment of all the capital—not in the representative of currency, but in money; and, indeed, a redeemable issue based upon a cash capital, was the doctrine of the bill. It gave to the officer designated by the State, a control and a supervision over the business of each institution, and by a new and wholesome feature, provided for examinations by disinterested parties, residents of the vicinity of the bank, and likely to be acquainted with all the facts necessary to form a just judgment of its real condition. A proper reserve fund was directed to be left with the Comptroller; and it could be readily demonstrated that, by the provisions of Mr. Ayrault's bill, it would have been impossible, within the range of ordinary contingencies, for a disastrous failure to have taken place, at least so as to affect the bill holder. The personal guaranty of the constitution was recognized and embodied, and the utmost care taken to identify the bill with all the principles which the experience of many years have shown to be reliable in the important department of finance.

The charters of many of our banks are, by the expiration of the time allotted to them, ceasing to exist, and the capital employed must be withdrawn, or forced into other channels. The establishment of a judicious system was demanded by the circumstances of the times; and whatever may be the diversity of opinion entertained of the plan thus proposed, its ability will not be questioned, nor its integrity. Of this last, the character of its author is a sufficient guaranty. It failed to be successful, it is true, but such is often the fate of the best prepared and wisest matured projects. If a better can be framed, it will be welcomed with satisfaction, for the only purpose that has been sought, is the good of the community—to give to banking capital all proper facilities for doing business, and, at the same time, holding it strictly to the accountability of the most rigid and punctual discharge of all its obligations.

No man but a practical banker can devise a practical bill; for it is

the surest to place the moulding of the great measures of finance in the hands of those who have made it their business to acquaint themselves with all the mutations, the vicissitudes, the different phases of the supply and demand for money. None theorize so extensively about restraints and guards, as those who would be puzzled to devise any opposing; and yet, not seldom has the currency of the country been left as a last problem given to the solution of those who had made it the object of their lives to discover what that system is, which is at once simple and safe.

Probably some banking plan will be settled upon as the financial basis of our State. It will be best received, if based upon the principles of the every-day transactions among business men. Commerce and industry, of necessity, their rules, and no devising will be found as the basis of confidence as that which shall meet the cordial approbation of the whole community.

—The necessity for some plan for the establishment of banks of issue has been seen in the steady diminution of the present institutions. There were 1 in 1849, 1; in 1850, 5; in 1851, 2; 1853, 10; 1854, none; 1855, 1; 1856, 2; 1857, 3; 1858, 3; 1859, 3; 1860, 3; 1861, 2; 1862, 7; 1863, 7; 1864, 5; 1865, 3; 1866, 12.

ART. VI.—COMMERCIAL CITIES OF EUROPE.

NUMBER XI.

DUNKIRK, FRANCE.

—HARBOR AND PORT—COMMERCE—COD, WHALE, AND HERRING FISHERY—DOMESTIC TRADE—FOREIGN TRADE—ENVIRONS—INSURANCE, ETC.

DUNKIRK, an important seaport of France, lies upon the Dover Straits, in $51^{\circ} 2' 9''$ north, longitude $2^{\circ} 22''$ east from Paris. Its distance from London is 68 leagues. Its population in 1836 was 25,000. Dunkirk is the nearest French seaport to London, being but 42 leagues distant from the city.

HARBOR AND PORT. The harbor of Dunkirk is a circular basin, the shape of which is formed by a belt of sand-banks. There being but two passages through this belt, one to the east and the other to the west, it furnishes, during war, a defence against hostile cruisers.

In 1821, much has been done for the improvement of this harbor. In other works, we may mention the reconstruction of the dam of the harbor and the formation of a basin with a sluice, intended to pierce the dam. In 1836, additional improvements were made, the object of which was to clear a channel for the entrance of deeply laden vessels.

Natural canals, with numerous branches, terminate at Dunkirk, and thus place a ready communication with Belgium and with Paris, and with manufacturing towns of the interior, such as Arras, Lille, Valenciennes, St. Quentin, &c., &c.

The harbor is a bed of English oysters, like that at Ostend, and furnishes the same place. These are sent to all parts of France, and

have obtained possession of many of the markets formerly supplied by Ostend.

COMMERCE. If the capital of Dunkirk was at all proportioned to the skill, enterprise, and hardihood of its people, its commerce would attain the highest prosperity. But, at present, almost all the business of the city is conducted on account of merchants residing elsewhere.

About 600 cargoes (amounting to some 40,000 tons) of coal, from the mines of Anzin, Mons, and Fresne, are annually exported from this place. The products of the cod fishery also form an important article of export. A great number of cargoes are sent to Caen, Havre, Bordeaux, Marseilles, and especially to Rouen, whence they are forwarded to Paris and places beyond.

COD, WHALE, AND HERRING FISHERY. The cod fishery is very advantageous to Dunkirk. It employs from 12 to 1500 sailors, brings large returns to fitters, and enriches the city by the encouragement it affords to mechanical industry.

About 100 vessels are engaged in this business. They are fitted out in February, and return in September or October. Their fishing ground is off the north-western shores of the Atlantic. The salt used in curing the cod is brought from St. Ubes. As soon as the fish are taken, they are cleaned and packed in casks. Their livers produce fish oil. The oil obtained from other parts of the intestines is used in tanning leather. The annual product of this fishery is about 4,000,000 kilograms of cod, valued at 2,000,000 francs.

The whale fishery, which in 1790 was carried on from this place with great success, was, for a long time, entirely abandoned. In 1832 it was resumed, and during the following four years, eight ships were fitted out.

A great obstacle to the success of this business, is the difficulty of obtaining experienced captains, and skilful and intrepid sailors. Unfortunately the government bounties have been given to those shippers who employ native seamen, instead of to those who obtain the services of skilful foreigners, such as the Scotch and Americans. The whale fishery is carried on both in the Northern and Southern seas. The northern voyages are only six or seven months in length; the southern are usually about two years.

In 1790, seventy vessels were sent from Dunkirk on the herring fishery; but at present, the business is almost abandoned. The ports of Dieppe and Boulogne have outstripped all their competitors.

DOMESTIC TRADE. Dunkirk sends to Havre gin and glass of its own manufacture, chicory, flax, oil, linen, &c. To Caen it sends coal, cod-fish, oil and seed-oil cakes. To Brest and Cherbourg, timber for ship building, gin, chicory, starch, &c. To Saint Malo, flax and flax-seed.

Several cargoes of tobacco are annually shipped by the government agents to Havre, Morlaix, and Bordeaux. Fifteen or twenty cargoes of flax and other articles, such as chicory, lard, oil, &c., are sent to Bayonne every year; from which place two or three loads of tar, pitch, and resin, are received in return. Dunkirk receives a large quantity of wine from Bordeaux and its neighborhood, and competes with Rouen in the export of champagne to Russia and Prussia. Its canals, communicating with the interior of Belgium, give it great advantages as a place of export; especially, because the charges for pilotage and entry are very heavy in the ports of Belgium. Dunkirk also receives from Bordeaux 2

or 300 casks of brandy and spirits, besides coffee, sugar, cocoa, pepper, cloves, raisins, prunes, Campeachy wood, juniper berries, sumac, rice, almonds, &c. From Marennes, and the islands of Oleron and Ré, Dunkirk receives about 150 cargoes of salt; and from Havre considerable quantities of exotic wood and colonial products.

To Marseilles, this port ships annually about eighty cargoes of linseed and other seed oil, the manufacture of Lille and its environs. In return, there come nearly thirty loads of soap, almonds, wood, liquorice, olive oil, sumac, &c. Its shipments to Cette consist mostly of grain and flour, and the annual returns from that place are about thirty cargoes of the wine of Provence and Languedoc, some Spanish and Italian wine, and a considerable quantity of the brandy and spirits of the neighborhood.

The wheat produced in the neighborhood of Dunkirk and Lille is, in color and weight, the finest in France, and is always in great demand. Of late, large quantities have been shipped to the French ports on the Atlantic and the Mediterranean.

FOREIGN TRADE. The commerce of Dunkirk with foreign countries is not less active than its domestic trade. It sends to England the wines of Burgundy, Champagne, and Bordeaux, flax, tow, oil-cakes, and many small cargoes of apples, purchased by the English in the markets of Bergues, Bourbourg, &c. It receives from that country, in return, iron in pigs and bars, lead, grind-stones, mill-stones, litharge, lamp-black, cotton, sulphur, colonial products, cheese, wool, cattle, cow and calf skins, &c. Considerable contraband trade is also carried on with England in silks, brandy, gin, &c.

From Norway, Dunkirk imports great quantities of timber of all kinds; from Russia, linseed, hemp, tallow, tar, pitch, potash, &c.; from Portugal, salt, oranges, citrons, figs, raisins, and other fruits; from Tuscany, some cargoes of potash; from the United States, tobacco, potash, cotton and dye woods; from Martinique, sugar, coffee, cocoa, Campeachy wood, &c.

To Martinique and Gaudaloupe, Dunkirk exports gin, brandy, bottles and demijohns, peas, beans, potatoes, the products manufactured in the north of France, such as cottons, linens, lawns and laces, perfumery, furs, articles of dress, such as habits, robes and chemises, nails, iron ware, cables, small cord, bricks, tiles, candles, brushes, hemp and flax.

A regular line of packets runs between Dunkirk and Hull. The port has also three lines of steamboats, running to Havre, Hamburg, and Rotterdam.

ENVIRONS. In the environs of Dunkirk there are some manufactories, such as gin-distilleries, sugar-factories, glass-houses, (producing bottles and demijohns to be exported to the colonies,) and also a white-lead factory and a ship-yard, which is in constant activity. But, to a stranger, the most striking feature of the surrounding country is the perfection to which the cultivation of the soil is carried. The chief agricultural products are grain and the red beet. There are also extensive pasture lands in the neighborhood, supplying food to an immense number of cattle.

INSURANCE, ETC. It is difficult to effect marine insurance at this place. But few of the merchants take risks, and the business is left to the agents of the Antwerp, Havre, and Paris companies. The number of vessels belonging to the port is about 200. An entrepôt of prohibited merchandise is established here.

Art. VII.—STATISTICAL VIEW OF THE AMERICAN WHALE FISHERY.*

THE whaling fleet of the United States consisted, on the 1st of January, 1849, of 580 ships and barks, 20 brigs, and 13 schooners, with a total tonnage of 195,598 tons, owned in the following places :—

	Ships & barks.	Brigs.	Schooners.	Whole No. of vessels.	Tonn.
New Bedford.....	246	2	1	249	80,680
Nantucket.....	67	1	1	69	23,477
New London.....	48	1	4	53	17,880
Fairhaven.....	49	.	.	49	15,805
Bag Harbor.....	41	.	.	41	14,549
Warren, R. I.....	20	.	.	20	6,558
Stonington.....	21	.	.	21	6,414
Mystic.....	15	.	1	16	4,897
Cold Spring.....	8	.	.	8	3,315
Greenport.....	10	.	.	10	3,059
Westport.....	10	5	.	15	2,804
Edgartown.....	6	2	.	8	2,408
Newport.....	6	.	.	6	1,984
Mattapoisett.....	6	4	.	10	1,880
Fall River.....	5	.	.	5	1,615
Providence.....	4	.	.	4	1,459
Provincetown.....	1	3	6	10	1,360
Falmouth.....	3	.	.	3	1,106
Holmes' Hole.....	3	.	.	3	949
Lynn.....	2	.	.	2	730
Bridgeport.....	2	.	.	2	709
Salem.....	1	.	.	1	398
Wareham.....	1	.	.	1	374
Sippican.....	1	.	.	1	256
New Suffolk.....	1	.	.	1	227
Bristol.....	1	.	.	1	222
Plymouth.....	1	.	.	1	175
Somerset.....	1	.	.	1	137
Dartmouth.....	.	1	.	1	111
Yarmouth.....	.	1	.	1	90
Total.....	580	20	13	613	195,596
Average tonnage.....	tons				319

The ship *Hope*, of New Bedford, sailed in 1843, last reported ashore at New Zealand, is not included in this list.

The largest vessel in this fleet is the ship *South America*, of Providence, 616 tons, and the smallest the schooner *Atlas*, of New London, 81 tons.

The time of sailing of these vessels is as follows :—

	Ships & Barks.	Brigs.	Schooners.	Total
Sailed in 1844.....	11	...	.	11
" 1845.....	81	...	1	82
" 1846.....	121	1	1	123
" 1847.....	165	2	3	170
" 1848.....	159	10	3	172
In port.....	43	7	5	55
Total.....	580	20	13	613

* For an elaborate account of the American Whale Fishery, embracing a history of its rise and progress, see *Merchants' Magazine* for November, 1840, Vol. III., pp. 361 to 394.

The vessel now at sea out the greatest length of time is the ship Barclay, of New Bedford, sailed 20th July, 1844.

The ship Alexander, of Sag Harbor, arrived 19th July, 1848, about four years ten months and four days, perhaps the longest voyage ever made by an American ship.

Of the whole number of vessels at sea (558), about one-half are engaged chiefly in the sperm whale fishery, the other half making the right whale the main object of their pursuit; the vessels of larger tonnage being generally right whalers, and the smaller, including the brigs and schooners, in the sperm fishery.

About 35 brigs, schooners, and small barks are employed in the sperm whale fishery in the North and South Atlantic; about 85 ships and barks in the South Atlantic and Indian Ocean for sperm and right whales; and most of the remainder in the Pacific—those for right whales cruising on the coasts of Asia and America from 1st March to 1st October each year in latitude 35° to 60° N.; the sperm whalers cruising on the line, and coasts of Peru, Japan, and New Zealand during the whole year.

The following table shows the number of vessels employed in the American whale fishery at different dates during the last twenty years:—

	Ships & Barks.	Brigs.	Schooners.	Total.
January 1, 1829.....	184	17	2	203
" 1834.....	414	7	...	....
" 1843.....	589	55	14	658
" 1846.....	680	34	22	736
" 1849.....	580	20	13	613

It will be seen from this table, that while the increase has been very great since 1st January, 1829, yet the last three years have shown a *decrease* of 123 vessels, or 17 per cent, being a greater reduction than the increase of the three previous years. From the tables at the close of this article, it will be seen that the ships arriving with whale oil in the years 1843, 1844, and 1845 were absent but little more than two years, and averaged 2,058 barrels whale oil, with an average price of 34½ cents; while the right whale ships arriving in 1846, 1847, and 1848 were absent an average of thirty-one months, and obtained only 2,066 barrels of whale oil, with an average price of 33 cents—an addition of one-fourth to the time, with no increase of quantity and with lower prices.

The laws of *profit* and *loss*, which invariably govern all trade, have caused this great reduction in the whaling fleet; and unless the price of whale oil should materially advance, or new and undisturbed *grounds* (as the waters frequented by whales are technically called) be found, which it seems can be hardly hoped for, all oceans, seas, and bays having been visited, the number of vessels in this branch of the whaling business will probably continue to decrease. Those well qualified by experience and observation to judge, believe that all the vessels employed in the right whale fishery the past three years have not, in the aggregate, paid to their owners 6 per cent interest, without regard to profit, which, from the great length of time, hazard, and risk, ought certainly to be looked for.

The diminution in the whaling fleet here spoken of has fallen on those vessels engaged in the capture of the right whale, the prices obtained for sperm oil affording fairer remuneration for the additional time now required for a voyage. The right whale ships formerly procured their cargoes entirely in the South Atlantic Ocean, on the coast of Brazil, where the first

vessels were sent about 1774, and were absent from nine to twelve months. The whole amount of whale oil then taken was very small. In the year 1826, the whole number of vessels sailed from the United States for this fishery was 23, viz:—New Bedford, 13 ships; Sag Harbor, 6; New London, 2; Vineyard, 1; New York, 1; and the whole import of whale oil in 1828, twenty years since, was but 46,065 barrels, whalebone 417,966 pounds—whale oil being worth about 26 cents, and bone 37½ cents.

About the years 1829 and 1830 the right whalers began to extend their cruises eastward, and found abundance of whales in the vicinity of the Island of Tristan d'Acunha. Having never been disturbed, the whales here were tame and easily taken; and many ships returned from this ground in 1831 and 1832, absent from seven to nine months, with full fares, and the old cruises on the Brazil banks were abandoned. As the whales grew shy and were killed off in the South Atlantic, the ships worked east of the Cape of Good Hope, in the Indian Ocean, off the South Coast of New Holland, and finally at New Zealand, around which last island was the favorite cruising ground for right whalers from 1835 to 1840. Here, too, the untiring energy of the whalers frightened and dispersed the fish which his skilful hands failed to capture, and new and undisturbed fields were to be sought out. About this time right whales of a large size were found in the North Pacific Ocean, and in the year 1839 the ships *Elbe* and *Beaver*, of Poughkeepsie and Hudson, took 2,800 barrels of whale oil off the north-west coast of America. Gradually, as the ships resorted to this ground, they cruised west towards the coast of Kamtschatka, and found whales very abundant in the seas on the east coast of Asia.

The following table shows the amount of whale oil taken in north latitude in the Pacific Ocean.

Years.	Ships.	Av. bbls.	Bbls.	Years.	Ships.	Av. bbls.	Bbls.
1839.....	2	1,400	2,800	1844.....	170	1,528	259,470
1840.....	3	587	1,760	1845.....	263	953	250,600
1841.....	20	1,412	28,200	1846.....	292	869	253,800
1842.....	29	1,627	47,200	1847.....	177	1,055	186,650
1843.....	108	1,349	146,800	1848.....	150	(Estimated.)	

Reports at this date (January 10) have been received from only 8 ships which had left the coast in 1848, and they had only taken an average of 704 barrels.

In the year 1846, an adventure was started from New London for the capture of the right whale in Davis Straits, where the English have whaled for 200 years, but which had heretofore remained undisturbed by Yankee skill and daring since the Revolution; and it was argued that, as the Americans had driven the English from the South Sea fishery, they might successfully compete with them among the icebergs of the north.

The first fitting and preparation of a vessel for the ice whaling is attended with much expense not required for any other voyage. The bottom of the ship must be double covered with oak plank, and her bows very strongly fortified, without and within, to enable her to force her way through the ice and resist its pressure. The ship *McLellan* was purchased, fitted, and sailed for Davis Straits April 8, 1846; since which time she has made three voyages averaging 6 months and 20 days, with an average cargo of 612 barrels whale oil. The success of this ship has not been sufficient as yet to warrant the sending of any additional vessels to the ice, but the *McLellan* is fitting for another voyage thither.

inhabitants of the Island of Nantucket were the first persons to extensively in the whale fishery, and as early as the year 1690, made whaling a profitable business, discovering the whale from a boat on shore, capturing him in boats, returning to the shore with the whale to extract the oil from the blubber. As the whales grew scarce about the island, they pushed off into the ocean in small vessels, and in the year 1748 they had 60 sail, from 50 to 75 tons, and caught 11,250 barrels of oil. The first sperm whale caught at Nantucket, and probably by Americans, was taken by the schooner Hussey about the year 1712. The ship Beaver, of 240 tons, sailed from Nantucket in the year 1791 to the coast of Peru, and was the first American whaling vessel which sailed round Cape Horn. She cost \$10,200 fitted for sea, was absent 17 months, and brought home 1,000 barrels sperm oil, and 250 barrels of oil.

IMPORTED AT NANTUCKET IN

Sperm oil.	Whale oil.	Years.	Sperm oil.	Whale oil.
Bbls.	Bbls.		Bbls.	Bbls.
7,707	10,503	1828.....	43,174	1,033
14,864	13,426	1848.....	22,362	7,409

Although the enterprising inhabitants of Nantucket were the first to extensively in the whale fishery, yet they have not greatly increased their number of vessels in thirty years; and while New Bedford wharves have added a large number of ships, the good people of Nantucket seem to have been satisfied to hold on the even tenor of their

	Ships & Barks.	Brigs.	Schooners.
Not owned, January 1, 1819.....	57	1	.
" " 1829.....	60	1	.
" " 1849.....	67	1	1

showing an increase in twenty years of only seven ships and one schooner. New Bedford, which stood but little ahead of Nantucket twenty years ago, has made very large additions, and now owns nearly half the whaling fleet of the United States.

	Ships & Barks.	Brigs.	Schooners.
New Bedford owned, January 1, 1829.....	67	8	1
" " 1849.....	246	2	1

The following table shows the import of sperm oil into the United States with the average price, for the last thirty-four years, since 1815:—

	Bbls.		Bbls.
..... \$1 40	2,186	1832.....	\$0 85 71,435
..... 1 12	7,343	1833.....	0 85 90,000
..... 0 72	31,603	1834.....	0 72 121,700
..... 0 90	17,102	1835.....	0 84 172,682
..... 0 83	22,716	1836.....	0 89 128,685
..... 0 92	32,127	1837.....	0 82 181,724
..... 0 68	43,365	1838.....	0 86 125,977
..... 0 65	42,839	1839.....	1 05 142,483
..... 0 43	86,725	1840.....	1 03 158,431
..... 0 45	92,475	1841.....	0 94 157,413
..... 0 71	60,052	1842.....	0 73 165,637
..... 0 75	33,000	1843.....	0 63 166,985
..... 0 73	92,865	1844.....	0 90 139,481
..... 0 62	73,000	1845.....	0 88 157,603
..... 0 61	80,000	1846.....	0 88 95,219
..... 0 66	106,201	1847.....	1 01 120,753
..... 0 71	106,436	1848.....	1 00 107,876

Largest import in twenty years in 1837, 181,724 barrels ; highest price in 1839, \$1 05.

A table showing the import of whale oil since 1828, and the average price since 1840 :—

	Bbls.		Bbls.
1828.....	46,065	1839.....	227,816
1829.....	64,039	1840.....	\$0 30½ 208,688
1830.....	86,294	1841.....	0 31½ 205,019
1831.....	113,948	1842.....	0 33½ 161,041
1832.....	179,244	1843.....	0 34½ 206,737
1833.....	159,166	1844.....	0 36½ 261,245
1834.....	122,292	1845.....	0 32½ 272,186
1835.....	125,100	1846.....	0 33 207,481
1836.....	\$0 36 131,157	1847.....	0 36 313,150
1837.....	0 33 219,138	1848.....	0 33 280,656
1838.....	0 32 225,000		

Largest import in 1847.

IMPORT OF WHALEBONE SINCE 1844.

1844.....	lbs. 2,532,000	1847.....	lbs. 3,341,000
1845.....	3,167,000	1848.....	2,023,000
1846.....	2,276,000		

It is believed that no accurate record was kept of the import of whale-bone for many years previous to 1844, but it is safe to estimate that a right whale will yield at least 800 pounds of bone to 100 barrels of oil. The price of this article has fluctuated from 9 cents in 1821 and 1822, to 55 and 60 cents in 1844.

The following statistical tables, showing the average time and success of the whaling vessels for the past seven years, are arranged from the New Bedford *Shipping List* :—

SPERM WHALERS.

SHIPS AND BARKS FROM THE PACIFIC AND INDIAN OCEANS.

Years.	Ships arrived.	Average time absent. Months. Days.	Sperm oil. Bbls.	Whale oil. Bbls.
1842.....	55	41 8	1,973	135
1843.....	70	41 13	1,641	194
1844.....	69	43 ...	1,419	293
1845.....	91	43 21	1,291	367
1846.....	42	41 6	1,350	260
1847.....	52	45 12	1,505	219
1848.....	52	41 19	1,292	192

It will be seen from this table that while the time of the ships arriving the past year was about the same as in 1843, five years since, yet the quantity of oil was diminished nearly one-fourth.

ATLANTIC SPERM FISHERY.

IN SMALL BARKS, BRIGS, AND SCHOONERS.

Years.	Vessels arrived.	Average time absent. Months. Days.	Sperm oil. Bbls.	Whale oil. Bbls.
1842.....	65	13 28	280	12
1843.....	56	14 20	288	25
1844.....	42	12 ...	248	38
1845.....	43	13 7	238	76
1846.....	48	14 7	259	14
1847.....	34	15 9	228	42
1848.....	31	16 21	303	18

The vessels employed in this fishery have diminished more than one-half in the past seven years.

RIGHT WHALERS.

SHIPS AND BARKS WHICH CRUISE MOST OF THE TIME FOR RIGHT WHALE OIL, AND DO NOT RETURN THE NEXT YEAR AFTER THEY SAIL.

Year.	Ships arrived.	Av. time absent. <i>Months. Days.</i>	Sperm oil. <i>Bbls.</i>	Whale oil. <i>Bbls.</i>
1842.....	74	24 15	1,722	422
1843.....	90	25 10	1,937	311
1844.....	112	25 9	2,059	248
1845.....	101	24 ...	2,180	196
1846.....	94	30 2	2,034	225
1847.....	150	31 7	1,978	195
1848.....	122	33 2	2,187	222

STOCKS OF WHALE AND SPERM OIL ON HAND.

	Sperm oil. <i>Bbls.</i>	Whale oil. <i>Bbls.</i>	Whalebone. <i>Lbs.</i>
January 1, 1848.....	5,690	29,170	921,500
" 1849.....	9,590	20,600	994,600

MERCANTILE LAW CASES.

BARBOUR'S CASES IN THE SUPREME COURT OF THE STATE OF NEW YORK.*

THIS is the first volume of New York Supreme Court Reports that ever contained cases in Equity, and Mr. Barbour has entered upon the new era of State reporting, and commenced the series of reports under the new constitution in an admirable manner. The present volume is got up in very handsome style, and the work of the reporter, in stating the facts, giving the arguments of counsel and the opinions of the court, fully and ably done.

In his preface, Mr. Barbour briefly sketches the changes in the judiciary of the State lately brought about by the abolition of the Court of Chancery, the merging of equity jurisdiction into that of the Supreme Court, the increase of the number of Supreme Court judges from three to thirty-two, and the division of the State into judicial districts, with four judges in each, and the consequent breaking up of the State (according to those disposed to take the least favorable view of the change) into eight local courts, instead of one really Supreme Court.

One of the difficulties arising from this supposed defect in the new system, is obviated by the course which we understand Mr. Barbour has pursued in preparing this volume. All the decisions made during the period of this volume, (September to December, 1847,) are not given; but the reporter was furnished by the judges with such decisions as seemed most important, and harmonized with each other. Unless this course were pursued, the profession and the public might be favored with the edifying spectacle of the same volume of the reports of one and the same court, containing decisions directly overruling the one, the other; or if such a thing cannot be supposed of tribunals, co-ordinate and equal decisions neutralizing and cancelling each other.

The great feature of the new judiciary system is its elective character. The division of the State into local districts, (admitting such to be the effect of this system,) is comparatively of little moment. Such, however, is not, in fact, the effect of the new arrangement; or rather, the system is so carried out as to prevent this localizing effect. The new code of New York requires the governor, in designating the judges to hold the courts throughout the State, to so assign them, that "not more than one-half, nor less than one-fourth, of the courts to

* Reports of Cases in Law and Equity in the Supreme Court of the State of New York. By OLIVER L. BARBOUR, Counsellor at Law. Vol. I. Albany: Gould, Banks, & Gould, 104 State-street. New York: Banks, Gould, & Co., 144 Nassau-street. 1848.

which each shall be assigned, shall be held out of the district within which he was elected." By this wise provision, while the services of the judge are in the main confined to his constituents, on the other hand, the advantage is secured, to a degree, of having judges not immediately appointed by those upon whose concerns they decide; and at the same time, the objection is partially obviated, that the new system is too localizing in its tendency, and lacks unity.

We repeat, it is the fact that the Judiciary, the first volume of whose reports is before us, is an elective one, which gives this volume its peculiar interest. It contains not many cases of a direct mercantile bearing. But what merchant of liberal views can fail to perceive the general and the important bearing of such great changes as have lately been made in the Judiciary system of the State of New York? Whatever affects the law of remedy on contract, or the tribunals by which that law is administered, affects the merchant. It must be satisfactory to the merchant, as well as to the lawyer, to find in this, the first volume of the new reports, the evidences of that same ability and learning which have hitherto marked the decisions of New York. Indeed, strange as it may seem, it is exceedingly doubtful if the most strenuous opponent of the elective system, on taking up this volume and reading it through, without previous intimation, would know that it came from an elective, or judiciary, or one appointed in any other way.

Among the decisions of general interest to merchants, is the able opinion of Justice Edmonds, in the matter of Prime, (page 296.) Messrs. Prime, Ward, & Co. were arrested, shortly after their failure, upon a warrant issued under the non-imprisonment act (so called) of 1831, at the suit of a judgment creditor. The statute provides, that on paying the debt for which he is arrested, or giving security to pay it in sixty days, or making an assignment of his property, or giving bond to assign, the debtor may be discharged. Messrs. Prime & Ward offered, on their arrest, to make a general assignment for the benefit of all their creditors, and demanded their discharge. The plaintiffs insisted that they were entitled to a discharge for their exclusive benefit; and the single question to be decided, and which, singularly enough, had never been settled, although the statute has now been in force seventeen years, was whether the assignment entitling the defendant to his discharge, is a general assignment, or one for the benefit of the prosecuting creditor alone. Justice Edmonds, after a masterly analysis of the statute, comes to the conclusion, contrary to his first impression, that the debtor must assign for the benefit of the judgment creditor alone, who prosecutes.

The decision in *Koppel vs. Henrichs*, (page 449,) is important to foreign consuls and those dealing with them. It is a well established and well known rule of jurisdiction, that foreign consuls can only be sued in the federal courts. In this case, the defendant, after the commencement of a suit against him in a State court, was appointed consul at New York for one of the German states. The court held that a subsequent appointment of this kind does not divest a State court of jurisdiction previously acquired.

The well known case of *Metzger* is also reported in this volume. Metzger was a notary in France, whence he fled to the United States, charged with forgeries and embezzlements to a large amount. The French authorities, upon his arrest here, demanded his surrender under the extradition clause of our treaty with France of 1843. No law had been passed by Congress, since the ratification of this treaty, providing for, or pointing out, the mode of carrying it into effect. Justice Edmonds, after a most able and elaborate constitutional examination of the question, comes to the conclusion that this clause in the treaty does not execute itself; that further action is necessary than the mere ratification of the treaty by the President and Senate, to give it legislative infra-territorial effect; and that no such act having been enacted by Congress, there was no authority in State or federal officers to hold or surrender the prisoner. He was, therefore, discharged.

Those interested, as victims, or otherwise, in the strange and stringent system of assessments for improvements, pursued in the city of New York, and in other cities in the State, will read with interest the decision in the matter of the *Flatbush Avenue*, (page 286,) in which it is held that in proceedings for the sale of

property for assessments, the utmost accuracy must be observed by the Commissioners, and the directions of the statute strictly pursued.

Such are a few of the important cases in this volume; and judging from its contents, we think all will agree, that in respect to its law reports, at least, the republic of New York has, as yet, taken no detriment from the establishment of an elective Judiciary, which, it was anticipated by many, would be attended with very grave results.

LIABILITIES OF SURETIES ON THE BONDS OF EMPLOYEES, IN BANKING AND OTHER PUBLIC INSTITUTIONS.*

In the Supreme Court of Louisiana, on appeal from the Fifth District Court of New Orleans. *Louisiana State Bank vs. James Duplessis, et al.*

Louisiana State Bank }
vs. } Appeal from the Fifth District Court of New Orleans.
James Duplessis, et al. }

SLIDELL, Justice.—The defendant, Ledoux, became the surety of James Duplessis, who was appointed note clerk of the bank on the 26th of February, 1840. The bond by which Duplessis and his two sureties, Ledoux and Durive, bound themselves jointly and severally, bears date 29th February, 1840, and is for the sum of \$12,000. It declares that, "whereas James Duplessis had been appointed note clerk, to continue in office during the will of the present or any future board of directors of said bank. Now, the condition of the above obligation is such, that if the said James Duplessis shall well and truly, and faithfully do and perform all and singular the duties of said office of note clerk; shall render a faithful account of all monies and effects committed to his charge, or under his control; and generally, shall save the said Louisiana State Bank harmless from, or on account of any negligence or misconduct of him, the said James Duplessis; then this obligation to be void, or else to remain in full force and virtue."

Duplessis embezzled from the bank, at different times in the years 1841, 1842, and 1843, an amount exceeding \$12,000, and the present action is brought to recover from Ledoux the amount of the bond, with interest from judicial demand. There are three grounds of defence presented by counsel:—

1st. The petition admits that the first amount embezzled by Duplessis was taken on the 30th day of March, 1841; and consequently, that he discharged his duty faithfully until that time. It is contended, therefore, that under the bond the defendant is not liable, because, at the date of the first defalcation, his appointment had expired; that his office was an annual office, and that his sureties were bound for one year only. Confining our inquiry to the words of the contract, in ascertaining its intention, it would be impossible to recognize the limitation claimed. But it is said that though the words of the bond may cover an indefinite period, yet if by an act of the legislature, or the records of a corporation, it appears that the office was annual, the obligation must be understood as referring to an office so limited.

The argument presented is mainly deduced from the provisions of the charter, with regard to the election of directors. It provides that the directors of the bank shall be annually elected, and forbids the re-election of more than two-thirds of the directors in office at the time of each annual election; permitting no director to hold his office more than three years out of four in succession. But it does not follow from this legislation with regard to the board of directors that the mere clerks and servants of the corporation should hold their appointments by the same tenure. If these clerks and servants were to be considered the mere clerks and

* The following case was tried before a jury, and a verdict rendered in favor of the defendants. The decision of the Supreme Court, on appeal, is a most able and highly important one, involving the liabilities of sureties on the bonds of employees, in banking and other public institutions. We give the opinion of the Court on the points involved, condensing the report of the case, which, with testimony, occupies nearly fifty pages.—*Commercial Times*.

servants of those who appoint them, the conclusion might be a reasonable one. But we do not so regard them. They are the clerks and servants of the corporation, and the limited term of service of the directors does not control the duration of such appointments. There is nothing in the by-laws of the bank limiting the duration of the place of the note clerk, and his appointment itself was general. These views rest upon high judicial authority. The subject was considered in the case of *Anderson vs. Langden*, (1 Wheaton, 91,) in which one McLeod was appointed agent of a company for the purpose of encouraging the manufacture and use of domestic merchandise. That case is almost analogous to the present one. In the argument of it, the case of the *Commonwealth vs. Fairfax* is cited, where the words "so long as he shall continue in office," in the condition of a sheriff's bond, were not construed to extend to a second and new appointment. Chief Justice Marshall, in delivering the unanimous opinion of the Court, said "the case of the sheriff's bond is very different. The commission of sheriffs, in Virginia, is annual; of course his sureties are bound for one year only. It is true the directors of a company are elected annually, but the company has not said that the agent shall be for one year only; his appointment is during pleasure. The sureties do not become sureties in consequence of their confidence in the directors, but of their confidence in the agent, whose sureties they are."

In the case of the *Union Bank vs. Ridgely*, the suit was upon a cashier's bond, who had been appointed without any specific duration of his office having been fixed. The propositions in that case had been urged ineffectually, and negatived by the court. See 1 *Harris & Gill*, Maryland reports, p. 432, wherein it is held that the cashier's office is limited only by the duration of the charter, subject to the removal of the incumbent by the directors, and that he was not necessarily an annual officer. The same doctrine is mentioned in the case of the *Dedham Bank vs. Chickering*, 3d Pickering, 340.

The counsel in the present case had laid much stress upon the 5th section of the charter of the bank, providing for the appointment by ballot of the president and directors, and other officers, agents, and servants. If the legislature had intended that the clerks and servants of the bank should be appointed annually, that the duration of their offices should be for one year only, it is surprising that this should have been left to mere implication. The lawgiver seems to us to have considered the subject of legislation mutual only, with regard to those who were to govern and control the institution, leaving the matter as to the agents and servants of the corporation to the discretion of the governing power. We find provision is made in the charter with regard to the amount of the cashier's bond, but nothing is said as to the duration of his office; yet the same clause which grants the power to appoint the cashier, provides for the appointment of clerks.

It is said, however, that in this case there was a re-appointment of Duplessis, and the counsel reply to show the fact, and as indicative of the construction put by the directors upon the charter, an entry from the minutes of the board, dated 3d March, 1841, being a resolution confirming the clerks in their respective situations. This is but an approval of past appointments, and cannot be construed into a new appointment.

We find nothing in the authorities cited at the bar which conflicts with the view we have taken as to this point of the defence, to wit: *The Liverpool Water Company vs. Atkinson*, 6 East, 507; *Lord Arlington vs. Merieke*, 2 Saunders, 411; the *Wardens of St. Savionnes vs. Bostock*, 5 Bos., and *Fuller*, 177; the *United States vs. Kirkpatrick*; the case of the collector of the poor and church rates in 2 *Bingham* (*Dudley vs. Evans*) 32, and in *Bigelow vs. Bridge*, 8 Mass., 267, in all of which the period of appointment, or duration of term of office, is expressly stipulated and averred. The defendant could not have misunderstood the terms of the bond, and must have considered himself responsible for Duplessis' honesty as long as the bank should think proper to employ him in the capacity designated in the instrument.

2d. The next ground of defence taken by Ledoux is, that he is discharged from all liability to the plaintiffs, because the bank, although called on by the defen-

tant to take legal steps against Duplessis, refused to do so, and allowed him to abscond. Defendant relies on the article 3030 of the Civil code, which is the same as the article of the Napoleon code, and upon the opinions of certain French commentators and tribunals as to its just intendment. Under the Roman law, it seems that the refusal of the creditor to sue upon the request of the surety, would not operate the surety's discharge, I 62 ff de fide ju ss, and Domet, Book III. tit. 4, sec. 2, art 5.

If we look to the literal language of the article 2037, -code Napoleon, and the corresponding article of our code, it would require an *act* of the creditor to discharge the surety. "The surety is discharged when by the *act* of the creditor the subrogation to his rights, mortgages and privileges, can no longer be operated in favor of the surety." We are of opinion, that under the circumstances of the present case, there has not been such an omission as would authorize us to consider the surety discharged. The surety was promptly notified of the defalcation. If he desired to have Duplessis arrested under the act of 1840, it was fully in his power to have obtained an order of arrest by paying the bank. The point in question was considered in the case of *Borette vs. Martin*, 16 Louisiana 36, by Judge Martin, which fully sustains the opinion of the present Court; see also case of *Cougot vs. Fournier*, 4 Rob. 423, and Civil Code, art. 3026.

3d. The next ground of defence, that Ledoux has been discharged from all liability on the bond in consequence of the gross neglect of the plaintiffs to perform the conditions, expressed and implied, which were incumbent upon them, and which formed the consideration of his contract as surety. In support of this point, the defendant relies upon the by-laws of the bank, and the testimony of the cashier. The by-laws point out the duties of the cashier in taking charge of the cash and examining the accounts of the bank, and also require the directors shall visit monthly the vaults, and cause an inventory to be made, to be compared with the books, in order to ascertain that they agree therewith, &c. The inquiry into the effect of the facts above stated (the testimony of the cashier) upon the legal right of the parties, resolves itself into two branches, of which the first is, whether these by-laws of the bank are to be considered as entering into the contract of the surety.

They certainly are not referred to expressly in the bond. It was conditioned for the faithful performance of Duplessis' duties; there was no useless qualification that the surety would be bound only in case the directors should vigilantly discharge their duty according to the by-laws of the bank. As between these parties, we feel bound to say that the by-laws are directory to the managers of the institution, and do not form a part of the contract with Ledoux. See *Angel and Ames on Corporations*, and the authorities cited. The question then remains, whether, under the terms of the bond itself, and the general principles of law affecting the contract, the absence of minute vigilance on the part of the directors, unaccompanied by fraud, discharges the surety?

Ledoux bound himself for the honesty of Duplessis, and he has been unfaithful—not a guaranty that he should be honest if closely watched—a bond with such a clause would not be accepted. The language of Chief Justice Marshall, in the case already cited on another point, is very pertinent here. See also *Trent Navigation Company vs. Harley*, 10th East, 40; *Angel and Ames on Corporations*, 317; 2d Metcalf, 241; *United States vs. Kilpatrick*, 9 Wheaton, 737. We must attribute the verdict of the jury to an erroneous conception of the legal effects of a want of exact and searching vigilance on the part of the cashier, and perhaps of the directors; and probably the refusal to have Duplessis arrested, contributed to turn their minds in favor of the surety, whose case is unfortunate.

It is therefore decreed that the judgment of the Court below in favor of Ledoux, be reversed, and that plaintiff recover of said Ledoux the sum of \$12,000, with interest and costs.

COMMERCIAL CHRONICLE AND REVIEW.

TENDENCY TO SPECULATION IN THE MARKETS—INCREASED DEMAND FOR GOODS—ACCUMULATION OF CAPITAL—ADVANCE OF STOCKS, AND IMPROVEMENT IN PRICES OF GOODS—UNITED STATES STOCK ISSUES ON FOREIGN ACCOUNT—PUBLIC CREDITORS RESIDING IN NEW YORK—EUROPEAN INVESTMENTS IN UNITED STATES STOCKS OF ALL DESCRIPTIONS—DEMAND FOR SPECIE—AUSTRIAN CREDIT—THE LOTH-CHILDS—PRICE OF PRODUCE IN GREAT BRITAIN—IMPORTS, EXPORTS, AND DUTIES OF NEW YORK 1848—NEW YORK DIVIDENDS—BOSTON DIVIDENDS IN BANK AND OTHER STOCKS—BALTIMORE DIVIDENDS ON CITY LOANS, BANKS, AND OTHER STOCKS—OUR COMMERCIAL RELATIONS WITH FRANCE, ETC.

THERE has been during the month a continued tendency to speculation in the several markets. The singular demand for goods which sprung up for California, on receipt of the remarkable news from that romantic region, gave an impulse to business at a season usually dull, and by reducing stocks of goods and improving prices at moments when minds were being excited by the wonderful accounts that were daily received through a thousand avenues of intelligence, gave a practical effect to the speculative desire, and prices, which have ruled low for a long time past, have generally advanced, the market presenting an unusual degree of activity and buoyancy for the season. The improvement is more particularly observable in the articles of ashes, coffee, cotton, corn, flour, molasses, whale and sperm oils, beef, pork, pickled and smoked meats, nutmegs, domestic liquors, sugars and whalebone, as well as in dry goods, which are probably some 15 per cent higher than at the close of the fall season of business, with small stocks and limited importations. Both manufactured and imported goods give evidence of the improving sales and brightening prospects of the coming year, and this feeling is manifest in the enhanced demand for, and rising prices of, raw material. Cotton, more particularly, has, under the influence of improved trade in Europe, advanced some 20 per cent on the lower, and 17 per cent on the higher grades since the early part of December, and this advance has imparted great confidence to the southern trade.

During the past year the accumulation of capital in the country has been so rapid, under many favoring circumstances of internal prosperity, that property of all kinds has steadily improved in value, notwithstanding the untoward state of the foreign trade, the disordered condition of Europe, and the war expenditure we have encountered. Stocks, more particularly, have felt this influence, and month by month they have improved, until the rates now are much over those of last year. Government stocks, more particularly, are some 8 per cent higher at the close than at the commencement of the year, the prosperity of which is indicated in almost every direction to which the attention is turned; and there never probably was a week preceding New Year in which money could be more readily obtained on all securities than in the last week of December, 1848.

Many articles of goods and produce have improved under the influence of the California news, as well from direct demand for that destination, as in the case of oils, from collateral influences; as it has been apprehended that the withdrawal of force from the whaling trade to dig gold in the Sierra Nevada, will diminish the supply of oil. Provisions were also for a time enhanced in value, through fear of the effects of the cholera at New Orleans in checking supplies. All the elements of prosperity are, however, in action both here and in Europe;

while cotton and breadstuffs are being exported in considerable quantities at low rates, the foreign demand for stocks is large and increasing. In our paper for December, we gave a table of the issues of stocks at Washington on foreign account, from October 2d to November 18th, inclusive. The following brings down the issues to January 13th:—

UNITED STATES STOCK ISSUES ON FOREIGN ACCOUNT.

	Total, Oct. 2 to Nov. 18.	Nov. 25.	Dec. 2.	Jan. 6.	Jan. 13.	Total.
land.....	\$1,765,550	\$346,000	\$192,000	\$346,500	\$137,500	\$2,787,550
many.....	349,500	95,700	37,200	161,000	157,800	801,200
ice.....	200,600	49,000	62,000	71,000	132,950	515,550
eriland.....	40,800	4,000	12,000	16,500	11,000	84,300
t.....	5,000	.....	.....	2,000	.....	7,000
ngal.....	7,000	.....	.....	.....	.....	7,000
ida.....	96,100	2,000	.....	3,800	.....	101,900
nd.....	10,000	.....	.....	.....	13,000	23,000
tum.....	3,000	.....	.....	.....	.....	3,000
il.....	28,000	.....	.....	.....	5,000	33,000
a.....	62,000	.....	.....	.....	.....	62,000
leira.....	7,000	.....	.....	.....	.....	7,000
ti.....	.....	.....	2,200	.....	.....	3,200
Total.....	\$2,574,550	\$496,700	\$306,400	\$600,800	\$457,250	\$4,435,700

during the months of June and December a full statement is made out in the Treasury Department of the amount of interest due to each stockholder of the several loans, and transmitted to the assistant treasurers, from Boston to New York, and ready for disbursement on the first day of January and July respectively. This arrangement suspends the transfer of stocks on the books from December 1st until the 1st of January, and it is therefore not until the reopening of the books it is possible to ascertain what investments have been made on foreign account during three or four weeks; for, although assignments may continue to be made in the market during that period, the transactions will remain incomplete until the transfer can be made on the public records.

On the opening of the books it appeared that the following is the number of foreign creditors residing in the city of New York, and the amount of each loan held by them, including the number and amount held by non-residents, whose names reside in the city:—

Of the loan of	No. of creditors.	Amount held by them.
1842.....	265	\$2,921,330 32
" " 1843.....	151	3,323,100 00
" " 1846.....	328	2,676,300 00
" " 1847.....	837	9,492,300 00
" " 1848.....	330	5,667,100 00
	1,911	\$24,080,130 32

This is the number of names on the several dividends payable in New York on the 1st instant. The whole amount of the several loans, exclusive of coupons, on the 1st instant, \$39,936,316 83.

On the first week after the opening, \$198,000 was transferred on account of Messrs. Corcoran & Riggs. It is a remarkable feature that the transfers on each account have increased, and this arises probably from the fact that improving prices in Paris permit holders to realize from French property for investment in more profitable if not more safe securities. Among these investments \$13,000 by the Prince de Joinville.

It will doubtless be the case, that such a reaction in the European markets as will permit of the realization of property at any reasonable rates, will produce as extensive investments in the United States descriptions. Thus, before the revolution, French 3 per cents were at 74, which gave an interest of $4\frac{1}{4}$ per cent. At the latest dates those three per cents were at 45, at which rate they yield $6\frac{1}{2}$ per cent, and are exposed to all the frightful evils that flow from a bankrupt and unsteady government. To realize such a stock, and invest in American securities, would be but the part of ordinary prudence. Thus a person who held French rentes, that cost him, at 75 per cent, \$3,000 one year since, received \$120 annual interest. If he can now realize those bonds at 50 per cent, he may invest in American stocks and still receive \$120; thus he will have sustained no actual loss in income by the fall of 25 per cent. Active parties abroad are bringing these facts prominently before the public. In London, United States 6 per cent stock may be had at 99 $\frac{1}{2}$, which will give, clear of all expenses, $5\frac{1}{2}$ per cent for 20 years; at the same time 3 per cent consols were at 87, a rate which will give $3\frac{1}{2}$ per cent interest, only making 50 per cent in the income of a stock in favor of the American security, and no stock will compare with the United States in point of safety.

The demand for specie, silver more particularly, for the continent of Europe is large, and sustains the rates in London in the face of extraordinary arrivals from America. Since the peace of 1815 it has been the case that industry and commerce and paper credits have made great progress upon the continent, and consequently the circulating paper has entered largely into the currency of Austria, Prussia, and France. In the present time of distrust, the old desire to hoard specie has returned in double force, and a marked feature in all the great cities is the desire to exchange notes for silver, and the demand for this purpose absorbs, at high rates, all that arrives in London. The Austrian credit is in a very hazardous condition, and a new loan of about \$40,000,000 is proposed, among growing republicanism, to support a tottering dynasty. Hitherto, the omnipresent house of Rothschild has been the focus into which the floating capital of the people of all European countries has been concentrated and applied to the demands of governments. Their efficiency depended upon the allegiance of the monied men to existing governments. The revenues of aristocracy, gentry, and the better class of trades people, were freely loaned to the support of governments, which, under the name of protection, conferred monopoly on capital, and exacted from the laboring many the means of paying interest on the surplus profits thus derived and loaned to the state. The house of Rothschild has, for forty years, been the agent between the governments and these classes. An entire change has now taken place, and it has become manifest that labor must be emancipated from thralldom and oppression; hence the classes among whom the Rothschilds retailed the stock they took from the government have no longer confidence in these securities; and when Austria proposes a loan, the means of paying of which depends upon the subjugation of two countries like Italy and Hungary to a foreign yoke, in this age of the world, the hazard becomes too great.

While the demand for specie is thus active for Europe, however, it appears that the accumulation of gold in the Bank of England is exceedingly rapid, and the amount is now approximating the highest ever held, being over £15,500,000; and while money continues abundant in face of large importations of breadstuffs

into Great Britain, those large supplies keep the rate of food down to such a point as admits of a marked improvement in the home trade of the country, as evinced with increased activity of the manufacturing districts and the advance in cotton. As compared with last year, the exports of certain articles of produce from September 1 to January 6 were as follows, to Great Britain and Ireland:—

Year.	Flour. Bbls.	Price. Jan. 6.	Wheat. Bush.	Corn. Bush.	Corn meal. Bbls.	Cotton. Bales.	Price, fair. Cts.
1847.....	95,767	\$6 06	118,094	606,301	51,715	164,651	6½ a 9
1848.....	639,994	5 75	854,005	5,071,713	45,193	352,400	5½ a 6½
Increase.....	544,227		735,911	4,465,412	.....	187,749	

The increase in value of exports is, for this period, very considerable, and with every prospect of improving markets for these articles abroad, the commerce of the year 1849 will probably turn out large and lucrative. The imports and exports of the port of New York, for the current year ending with December, has been as follows:—

IMPORTS PORT OF NEW YORK.

	1847.			1848.			1847.		1848.
	Specie.	Free.	Dutiable.	Specie.	Free.	Dutiable.	Duties.	Duties.	
January....	\$80,874	\$478,443	\$5,499,682	\$42,306	\$561,199	\$8,941,688	\$1,434,836	\$2,357,317	
February....	1,935,192	285,198	5,689,387	49,502	141,539	9,566,850	1,496,716	2,416,487	
March.....	1,399,458	786,937	6,060,746	92,781	2,199,749	5,971,601	1,652,099	1,553,002	
April.....	3,397,064	1,947,033	8,339,429	65,917	475,314	6,639,716	2,109,404	1,686,566	
May.....	1,396,697	738,755	5,868,361	133,922	1,983,754	5,087,979	1,487,173	1,312,036	
June.....	547,813	401,354	5,789,109	69,532	525,028	4,718,404	1,460,017	1,143,487	
July.....	924,919	861,578	7,950,602	64,631	650,055	7,046,349	2,088,335	1,794,536	
August....	195,555	404,990	12,974,196	133,855	1,198,553	9,196,775	3,337,341	2,539,372	
September..	94,546	916,109	8,111,845	197,098	513,749	8,168,294	2,096,604	2,119,571	
October....	100,773	312,363	4,753,836	197,998	439,587	5,134,339	1,922,404	1,388,633	
November..	58,915	471,149	4,117,164	104,971	185,970	4,518,565	1,024,766	1,182,549	
December..	30,712	111,951	3,316,815	70,489	283,735	3,251,940	856,576	806,090	
Total....	\$8,710,748	\$7,754,407	\$78,571,109	\$1,063,001	\$2,388,642	\$78,843,842	\$20,256,904	\$20,179,838	

EXPORTS.

	1847.				1848.			
	Specie.	Foreign Dutiable.	Foreign Free.	Domestic.	Specie.	Foreign Dutiable.	Foreign Free.	Domestic.
January....	73,728	40,073	26,273	3,043,552	1,183,517	292,684	4,496	\$2,456,618
February....	4,000	63,697	15,379	3,384,733	433,296	432,909	15,520	1,974,498
March.....	943,865	83,062	51,355	3,768,574	452,507	216,490	94,639	2,181,194
April.....	73,558	77,365	45,713	3,737,088	1,176,423	183,149	21,794	2,350,936
May.....	158,000	230,790	97,711	3,573,393	2,449,233	907,362	3,755	2,600,909
June.....	134,333	123,358	168,299	6,810,203	1,971,915	147,017	12,213	2,235,844
July.....	27,670	79,255	42,735	6,687,681	744,183	89,289	14,190	2,189,125
August....	66,000	114,888	52,357	4,812,063	331,031	150,244	38,992	2,230,908
September..	350,925	146,332	46,843	2,672,452	501,445	175,846	41,421	2,936,292
October....	674,548	156,852	81,792	3,151,238	832,423	231,789	74,924	3,576,051
November..	1,455,946	207,162	54,558	1,907,879	492,156	166,874	34,504	3,695,987
December..	1,746,265	104,942	30,178	1,998,524	365,878	383,954	23,311	2,616,787
Total....	\$4,833,455	\$1,436,286	\$733,123	\$45,547,340	\$10,734,783	\$2,607,582	\$334,299	\$31,002,379

The importation of dutiable goods has, it appears, been very nearly the same as last year, while the exports of domestic produce decreased \$14,500,000, or nearly 30 per cent, and that of specie was much increased. It will be observed, however, that in the last four months of the year there was a great excess of domestic exports. Thus the amount was as follows:—

Year.	September.	October.	November.	December.	Total.
1847.....	\$2,672,452	\$3,151,238	\$1,907,879	\$1,998,524	\$9,730,093
1848.....	2,936,293	3,576,051	3,695,987	2,616,787	2,824,418
Increase.....	\$263,841	\$424,813	\$1,787,408	\$918,263	\$3,094,325

The increased exportable value is 33½ per cent, and added to the amount of stocks sent abroad, as above stated, in connection with diminished imports, has

cates the large supply of bills as compared with demand, and the importations for the spring business are not likely to be large, at least in the early part of it. The goods imported for the past year have not remunerated the shippers very well; and although the demand for California has affected many descriptions, and improved the rates, it is probable that prices will not here rise so as to be remunerative in face of the renewed consumption of, and demand for, goods in most countries of Europe. The rise in raw materials, wool and cotton more particularly, under the enhanced demand from manufacturers, who look forward to a fair amount of business consequent upon the improved condition of the agricultural regions, arising from the prosperous export trade. The dividends earned by most companies, and payable in January, may be approximated in the following figures:—

NEW YORK DIVIDENDS.

	Interest payable.	Capital.	Owued in New York.	Owued in Europe.	Amount of interest.
N. York State debt	1½ p. c.	\$23,937,248	\$12,330,000	\$10,120,000	\$312,705
United States debt.	2½ "	6,927,835	2,323,100	1,000,000	173,195
" " "	6 "	44,876,499	16,757,030	4,000,000	1,346,294
Indiana.....	2 "	5,534,000	1,600,000	3,000,000	110,680
Illinois.....	½ "	12,000,000	3,000,000	6,000,000	60,000
Ohio.....	3 "	16,964,282	4,000,000	6,507,828	581,754
Maryland.....	1½ "	11,986,784	1,000,000	5,600,000	165,175
Aggregate pub. st'k		\$122,226,648	\$32,910,130	\$36,227,828	\$2,749,803
Tradesmen's Bank.	5 "	400,000	325,560	2,640	20,000
Mer. Exch'ge Bank.	8 "	750,000	482,550	25,500	60,000
Seventh Ward Bank.	4 "	500,000	405,650	1,900	20,000
North River Bank.	4 "	655,000	477,850	25,100	26,200
Bank of America..	3½ "	2,001,200	1,028,800	317,200	74,042
Phoenix Bank.....	3½ "	1,200,000	844,420	68,380	42,000
Bank of Commerce	4 "	3,447,500	1,886,280	211,640	137,800
Chemical Bank.....	6 "	400,000	285,000	5,000	21,000
Total banks.....		\$9,353,700	\$5,776,110	\$657,360	\$400,042
N. York Ins. Com.	3 "	500,000	327,300	54,300	15,000
N. York & Erie R'd	3 "	4,250,000	3,768,100	49,200	.....
Harlem Railroad....	4 "	2,250,000	1,746,500	.....	.....
Pater'n & Hud. R'd	4 "	500,000	200,000	.....	20,000
Cam'n & Am'y R'd	6 "	3,200,000	1,200,000	600,000	192,000
Total.....		\$138,586,348	\$54,528,140	\$36,988,738	\$3,376,845

The Erie Railroad dividend or interest is only on the new stock, \$3,000,000, and the Harlem on the preferred stock, \$1,500,000.

The proportions of stock owned in New York, as here given, are mostly from official sources. The stocks owned in other States, and in the interior of this State, form the balance between the sum of that owned in Europe and in this city, and the whole capital. That for New York is from a comptroller's report. The United States stock is that portion payable to holders in the city of New York, and we have estimated the proportion of that amount so held on foreign account. The Ohio stock held abroad is as it stands on the books of the company, and the Indiana and Illinois according to the proportions subscribed to the new loan. The bank and company stocks are according to an official report. There is a considerable amount of distant bank stock—Clinton Bank, Columbus; Franklin Bank, Cincinnati; Bank of Kentucky, and Bank of Mobile, &c., in addition to Eastern and Western Railroads, Insurance, Trust, Savings, Gas and

Canal Companies, &c., that are owned in this city, on which the dividends are receivable this month, as well as many city insurance dividends on mutual insurance scrips, &c., which we have not enumerated, as also interests upon mortgages.

The amount of the leading dividends payable in Boston, was estimated as follows :—

BOSTON DIVIDENDS.

When paid.	Stocks.	Capital.	Dividend.	Amount.
January 1—	Boston and Worcester Railroad.....	\$4,200,000	4	\$168,000
	Western Railroad.....	5,150,000	4	206,000
	Boston and Maine Railroad.....	2,974,100	4	118,964
	“ “ int. on new st'k.			8,571
	“ Lowell Railroad, (par \$500)....	1,800,000	4	72,000
	Fitchburgh Railroad.....	2,650,000	4	106,000
	Boston and Providence Railroad.....	2,897,500	3	86,925
	Pittsfield and North Adams Railroad.....	45,000	3	13,500
	Tremont Insurance Company.....	200,000	6	12,000
	American Insurance Company.....	300,000	4	12,000
	Franklin Insurance Company.....	300,000	7	21,000
	Salmon Falls Manufacturing Company.....	500,000	4	20,000
	Jackson Manufacturing Company.....	480,000	4	19,200
	Coheco Manufac. Com., on 2,000 shares.....			42,000
	Interest on Albany Bonds.....			30,000
	On Mass. Bonds, (Eastern Railroad \$2,500, Norwich and Worcester \$10,000).....			12,500
	On United States Loans.....			200,000
	On Boston City Stock.....			13,000
	On Norwich Stock.....			6,000
	On Vermont Central Railroad Bonds.....			9,000
	On Cheshire Railroad Bonds.....			13,000
	On Vermont and Mass. Railroad Bonds.....			900
Total amount payable January 1.....				\$1,207,500

When paid.	Stocks.	Capital.	Dividend.	Amount.
January 6—	Cabot Manufacturing Company.....	500,000	3	15,000
“ 8—	Fall River Railroad.....	1,050,000	3½	36,750
“ 15—	Eastern Railroad, Massachusetts.....	2,655,700	4	106,220
	“ New Hampshire.....	492,500	4	19,708
	Boston and Sandwich Glass Company.....	300,000	3	9,000
	Boston Exchange Company.....	335,000	3	10,050
	Connecticut River Railroad.....	1,500,000	4	60,000
	Interest on Massachusetts scrip, issued for stock in Western Railroad.....			24,875
“ 20—	Old Colony Railroad.....	1,600,000	3	4,800
Total.....				\$1,493,903

The following is an approximation to the capital, dividends, and amount of interest paid in Baltimore, for the last half year :—

BALTIMORE DIVIDENDS.

Banks.	Capital.	Dividend. per cent.	Amount.
Union.....	\$916,350 00	3	\$27,490
Farmers and Planters'.....	600,625 00	3½	21,121
Merchants'.....	1,500,000 00	3	45,000
Western.....	308,280 00	3	9,248
Chesapeake.....	340,577 00	3	10,217
Franklin.....	304,203 00	3	9,126
Baltimore.....	1,200,000 00	3	36,000
Mechanics'.....	590,844 00	3½	20,679
Marine.....	310,000 00	3½	10,850

BALTIMORE DIVIDENDS—CONTINUED.

	Capital.	Dividend. per cent.	Amount.
Banks.			
Farmers and Merchants'.....	\$393,500 00	3	\$11,806
Commercial and Farmers'.....	512,560 00	4	20,502
Insurance.			
Firemen's.....	252,000 00	6½	15,750
Baltimore Life.....	100,000 00	3	3,000
Miscellaneous.			
Baltimore Water.....	500,000 00	4	20,000
Turnpikes.			
Baltimore and Reisterstown.....	638,000 00	1	6,380
“ Frederick.....	597,302 00	½	4,480
“ York.....	279,000 00	½	1,395
“ Washington.....	140,000 00	½	1,050
“ Harford.....	100,000 00	2½	2,500
Boonsborough.....	68,000 00	½	340
United States Stocks.			
United States 6's.....	2,800,425 00	...	84,012
“ 5's.....	58,300 00	...	1,458
Baltimore City Loans.			
Baltimore city 6's.....	4,456,713 12	...	66,850
“ 5's.....	905,421 84	...	11,318
Maryland Stocks.			
6's, payable quarterly.....	3,738,334 34	...	56,075
6's “ semi-annually.....	202,326 15	...	6,069
5's “ quarterly.....	1,744,208 27	...	21,802
4½'s “ “.....	1,000,000 00	...	11,250
3's “ “.....	500,000 00	...	3,750
Total.....			\$539,518

There are several other companies of which we have no account, and besides these, there are the loans of the Baltimore and Ohio Railroad, which, with others, will make the amount of the dividends and interest since the 1st of October, over \$650,000.

The amount of dividends of these three cities, payable in January, is probably not short of \$6,500,000, and it will be remembered that these are the January dividends only. The New York companies pay some of them in almost every month in the year. Thus, of twenty-five banks, only seven pay in January, as above. In nearly every instance there has been an increase of earnings for the last six months of 1848 over the corresponding period of former years. Thus, seven New York banks declare \$356,142, January, 1849, against \$320,288, January, 1848, being probably a larger dividend than has ever been earned by the institutions in any previous similar period.

The accumulation of capital in the United States for the past few years has been exceedingly rapid, both from economy and industry, as well as from immigration, and the unfortunate results of English and European harvests, which have compelled the expenditure of much money there for those products of agricultural industry which were here in excess, and which, without European demand, would not have been readily available. It has also been the case during the past year, that political convulsions have induced the sale of goods abroad at very low prices for cash, and there was probably never a time when the consumers of goods in the United States procured so valuable returns for their surplus produce. In this manner it is that the capital of the old world serves to accumulate that of the new. In England, when the money price of food is high, the money price

of the products of industry is generally low, and they have in consequence to give double quantities of their industry for food, and reciprocally the United States get double prices for breadstuffs. As thus, if with flour at 20s. in Liverpool, a certain quantity of cloth will command 10s. per yard, then a barrel of United States flour will exchange for two yards. If, however, flour rises to 35s., and, as a usual consequence of the advance of food, the cloth falls to 7s., then the United States producer gets five yards of cloth instead of three. In this manner it is that the United States have profited by the events in Europe for the past two years. It has been the effect of the English corn laws to produce these violent fluctuations in price, and, as a consequence, to dissipate, in a twofold ratio, the capital of the country in time of scarcity. In February, 1849, according to the existing law, the duties on corn will be finally removed in England, and the English market will be open to the surplus of all countries. The effect of this will be, probably, not to produce any violent and sudden change in the markets; but gradually, under the action of rapid steam communication, to keep the English markets so well and steadily supplied with food as to prevent anything like those serious fluctuations which have been witnessed in the last two years. That wheat rose in England to some 120 shillings per quarter, grew out of the fact that imports so large as she then required were unusual, and commerce had made no provision for the transportation; hence a large portion of the price was absorbed in that item of expense.

The events of that year showed, however, what before had not been fully credited, viz: that with *adequate means of transportation* there is no limit to the supply which can be furnished by the United States, and a very considerable portion of this supply can, by the great railroad communications to be opened this year, in addition to others already in existence, be promptly placed in a rising market.

Under the new administration of France, there is the best hope that those antiquated and monarchical restrictions which have so long clogged the commerce, and hampered the industry of that country, will be removed, or at least relaxed, in favor of the United States. Up to this time, France has no commercial treaties; but the new president, as far as any direct indications have proceeded from himself, recognizes those sound principles of political economy which alone are suited to a republican form of government, based upon the actual equality of its citizens. Peace, and unrestricted and individual enterprise, unbiased by government, are asserted to be the elements of French prosperity, and to attain these ends, many taxes must be removed. England, as an instance, has found it necessary to abandon the tax on cotton, and Germany has done so likewise. France cannot tax the article and expect her people to compete with those spinners who use the untaxed article. The manufacturers of England found 12 per cent duty too onerous on the raw material, and they repealed it; yet the French manufacturer continues to pay 30 per cent! That the commercial relations of republican France and republican America will be drawn closer together, for the advantage of both, there can be no doubt.

JOURNAL OF BANKING, CURRENCY AND FINANCE.

THE COINAGE OF THE UNITED STATES.

THE Mint of the United States, which has been established for the coinage of the precious metals, is one of the most important branches of the Treasury Department of the General Government. Placed by the Constitution under the supervision of the Secretary of the Treasury, its operations are annually reported by the Director, and laid open by the President to Congress. It is our design, in the present paper, to trace the progress of this establishment from its origin to the present time, and to exhibit the facts connected with the kind and amount of the coins which have been issued from the institution during the whole period of its existence.

While the colonial dependence of the country upon Great Britain continued, the earliest coins which were here circulated were derived from the parent government. In the colony of Massachusetts, however, as well as in other colonial settlements, those were so scarce that it was customary to prosecute domestic trade and to pay taxes by the transfer of the products of the land, as well as cattle, and also furs and peltry. In consequence of the inconvenience springing from this condition of things, the former colony, during the year 1652, passed a law establishing a Mint. This law provided for the coinage of shillings, sixpences, and threepences, to be of the fineness of sterling silver, and to be "two pence in the shilling of less value than the English coin." This Mint continued in existence thirty years, and a considerable amount of coin was issued during that period. The device of a pine tree upon one side of the shilling has given to the entire series the general designation of "the pine tree coinage." In the year 1662, silver and copper coin were also issued by the colony of Maryland, and those constituted the sole issues of silver coin previous to the separation of the colonies from the parent country. Copper coin was, however, issued by other colonies. Half-pennies were in 1694 struck for the Carolinas; twopenny pieces and pennies in 1723; another emission of pennies in 1723 was made; and during the year 1773, half-pennies were coined for the State of Virginia. Before the permanent establishment of the national Mint, and after the Revolution, there were, moreover, various species of silver and copper coin issued both by States and individuals.

With the increase of trade throughout the colonial establishments, however, foreign coin, both gold and silver, were introduced, and constituted a part of the circulating medium. Those were principally composed of guineas, joes, half-joes, doubloons, and pistoles in gold; and dollars, with their various parts, pistareens, with their parts, British shillings and sixpences, in silver. After the Revolution, French crowns were extensively circulated throughout the country; but the coin most generally known was the Spanish American dollar, which, about that period, became so abundant that it was adopted as the standard of our own money. The pound of the colonies was, moreover, adopted at the same standard as the British pound, but it was soon depreciated in consequence of excessive issues.

On the occurrence of peace, measures were adopted for the purpose of establishing a system of national coinage. The financier of the confederation, Robert Morris, was directed by Congress to communicate to that body his views regarding the general subject of coins and currency, and early in 1782 his report upon the subject was presented. During the year 1784, Mr. Jefferson also made a report upon the same topic; and on a basis at that time proposed and ultimately adopted, it was concluded to issue four coins of the following denominations:—

1. A golden piece of the value of ten dollars.
2. A dollar in silver.

3. A tenth of a dollar in silver.

4. A hundredth of a dollar in copper.

The policy which was thus pursued respecting the general subject of coinage had been exercised under the confederation; but, in 1787, the Constitution of the United States prohibited those local issues, and vested the exclusive right of coinage in the national government. In accordance with this policy, a code of laws for the establishment and regulation of the Mint was enacted on the 2d of April, 1792, and under that system the coinage was executed for a period of forty-two years, with some unimportant modifications. The several denominations of those coins comprised gold eagles of the value of ten dollars, gold half and quarter eagles of the same relative value, silver dollars valued at one hundred cents, half dollars, quarter dollars, dimes, and half dimes of the same relative value, and copper cents and half cents. In consequence, however, of certain circumstances bearing upon their intrinsic value, modifications have, from time to time, been made in the standards of the usual coins by act of Congress, as they seem to have been required.

The present organization of the Mint of the United States is of great interest. Prior to the year 1835, there existed but one institution, the parent Mint, which commenced operations in 1793, and is established in the city of Philadelphia. It occupies a spacious and elegant edifice of white marble fronting upon Chesnut-street, and provided with all the delicate machinery and other appliances required for assaying, melting, refining, and the proper coinage of the precious metals. During that year three branches of the parent Mint were created by act of Congress. Two of these were located in the centre of the gold mining region, the one in the town of Charlotte, North Carolina, and the other in Dahlonega, within the State of Georgia, both being exclusively confined to the coinage of gold. The other was established in New Orleans for the coinage of gold and silver. During the year 1838 those branches went into operation, their coinage being uniform with that of the parent Mint, and is tested at this institution. Each of the branches is under the management of superintendents, whose official duties pass under the general supervision of the parent establishment in Philadelphia. We subjoin a corrected statement of the amount of coinage at the Mint of the United States, in the several denominations of coin, from the commencement of its operations until the 31st of December, 1847, inclusive :*

AMOUNT OF COINAGE AT THE MINT OF THE UNITED STATES, IN THE SEVERAL DENOMINATIONS OF COIN, FROM THE COMMENCEMENT OF ITS OPERATIONS UNTIL DECEMBER 31, 1847, INCLUSIVE.

Year.	GOLD COINAGE.				Total gold coinage.	
	Eagles. <i>Pieces.</i>	Half eagles. <i>Pieces.</i>	Quarter eagles. <i>Pieces.</i>	Number. <i>Pieces.</i>	Value. <i>Dolls. Cts.</i>	
1793.....	2,795	8,707	.....	11,502	71,485	00
1794.....						
1795.....						
1796.....	6,934	6,196	963	14,093	102,727	50
1797.....	8,323	3,609	859	12,791	103,422	50
1798.....	7,974	24,867	614	33,455	205,610	00
1799.....	17,583	7,451	480	25,414	213,285	00
1800.....	25,965	11,622	.....	37,587	317,760	00
1801.....	29,254	26,006	.....	55,260	422,570	00
1802.....	15,090	53,176	2,612	70,878	423,310	00
1803.....	8,979	33,506	423	42,908	258,377	50
1804.....	9,795	30,475	3,327	43,597	258,642	50
1805.....	.....	32,183	1,781	34,964	170,367	50

* For this corrected table we are indebted to the politeness of R. M. PATTERSON, Esq., the son of the able and efficient Director of the Institution, and to the Manual of Coinage, issued by the Assayers of the Mint of the United States.

AMOUNT OF COINAGE AT THE MINT OF THE UNITED STATES—CONTINUED.

GOLD COINAGE—CONTINUED.

Years.	Eagles. Pieces.	Half eagles. Pieces.	Quarter eagles. Pieces.	Total gold coinage.	
				Number. Pieces.	Value. Dolls. Cts.
1806.....	.....	64,093	1,616	65,709	324,505 00
1807.....	.....	84,093	6,812	90,905	437,495 00
1808.....	.....	55,578	2,710	58,288	284,665 00
1809.....	.....	33,875	.....	33,875	169,375 00
1810.....	.....	100,287	.....	100,287	501,435 00
1811.....	.....	99,581	.....	99,581	497,905 00
1812.....	.....	58,087	.....	58,087	290,435 00
1813.....	.....	95,428	.....	95,428	477,140 00
1814.....	.....	15,454	.....	15,454	77,270 00
1815.....	.....	635	.....	635	3,175 00
1816.....	.....	.....	.....	.....	.....
1817.....	.....	.....	.....	.....	.....
1818.....	.....	48,588	.....	48,588	242,940 00
1819.....	.....	51,723	.....	51,723	258,615 00
1820.....	.....	263,806	.....	263,806	1,319,030 00
1821.....	.....	34,641	6,448	41,089	189,325 00
1822.....	.....	17,796	.....	17,796	88,980 00
1823.....	.....	14,485	.....	14,485	72,425 00
1824.....	.....	17,340	2,600	19,940	93,200 00
1825.....	.....	29,060	4,434	33,494	156,385 00
1826.....	.....	18,069	760	18,829	92,345 00
1827.....	.....	24,913	2,800	27,713	131,565 00
1828.....	.....	28,029	.....	28,029	140,145 00
1829.....	.....	57,442	3,403	60,845	295,717 50
1830.....	.....	126,251	4,540	130,891	643,105 00
1831.....	.....	140,594	4,520	145,114	714,270 00
1832.....	.....	157,487	4,400	161,887	798,435 00
1833.....	.....	193,630	4,160	197,790	978,550 00
1834.....	.....	732,169	117,370	849,539	3,954,270 00
1835.....	.....	371,534	131,402	502,939	2,186,175 00
1836.....	.....	553,147	547,986	1,101,133	4,135,700 00
1837.....	.....	207,121	45,080	252,201	1,148,305 00
1838.....	7,200	286,588	47,030	340,818	1,622,515 00
1839.....	28,248	118,143	27,021	183,412	1,040,747 50
1840.....	47,338	137,382	18,859	203,579	1,207,437 50
1841.....	63,131	15,883	.....	78,964	710,475 00
1842.....	81,507	27,578	2,823	111,908	960,017 50
1843.....	75,462	611,205	100,546	787,213	4,062,010 00
1844.....	6,361	340,370	6,784	353,515	1,782,420 00
1845.....	26,153	417,099	91,051	534,303	2,574,652 50
1846.....	20,095	395,942	21,598	437,635	2,234,655 00
1847.....	862,264	919,781	29,814	1,811,859	13,296,080 00
Total.....	1,360,351	7,203,755	1,247,626	9,811,732	52,741,350 00

AMOUNT OF COINAGE AT THE MINT OF THE UNITED STATES—CONTINUED.

SILVER COINAGE.

Years.	Dollars. Pieces.	Half dollars. Pieces.	Quarter dollars. Pieces.	Dimes. Pieces.	Half dimes. Pieces.	Total silver coinage.	
						Number. Pieces.	Value. Dolls. Cts.
1793.....	904,791	323,144	.....	.....	.....	614,351	370,683 00
1794.....							
1795.....							
1796.....	72,990	3,918	5,894	92,135	10,220	115,097	79,077 50
1797.....	7,776	.....	252	25,261	44,327	77,816	12,581 45
1798.....	327,536	.....	.....	27,550	.....	355,086	330,291 00
1799.....	423,515	.....	.....	.....	.....	423,515	423,515 00
1800.....	230,920	.....	.....	21,760	24,000	256,680	234,326 00
1801.....	54,454	20,269	.....	34,640	33,910	153,293	74,750 00
1802.....	41,650	29,290	.....	10,975	13,010	95,525	52,343 00
1803.....	66,064	31,715	.....	33,040	37,850	166,669	87,118 00
1804.....	19,570	154,519	6,738	8,365	.....	191,092	190,340 50

AMOUNT OF COINAGE AT THE MINT OF THE UNITED STATES—CONTINUED.

SILVER COINAGE—CONTINUED.

Dollars. <i>Pieces.</i>	Half dollars. <i>Pieces.</i>	Quarter		Dimes. <i>Pieces.</i>	Half dimes. <i>Pieces.</i>	Total silver coinage.	
		dollars. <i>Pieces.</i>	dollars. <i>Pieces.</i>			Number. <i>Pieces.</i>	Value. <i>Dolls. Cts.</i>
321	561,723	131,384	198,750	15,600	460,817	140,398 50	
.....	639,576	308,184	.....	.....	1,045,700	471,319 00	
.....	1,051,576	530,643	165,000	.....	1,437,919	597,448 75	
.....	1,368,800	.....	.....	.....	1,368,800	684,300 00	
.....	1,405,810	.....	44,710	.....	1,450,590	707,376 00	
.....	1,376,576	.....	6,355	.....	1,982,631	633,773 50	
.....	1,303,644	.....	65,180	.....	1,988,694	608,340 00	
.....	1,628 039	.....	.....	.....	1,628 059	814,029 50	
.....	1,941 903	.....	.....	.....	1,941 903	930,951 50	
.....	1,039,075	.....	491,500	.....	1,480,575	561,687 00	
.....	.....	89,939	.....	.....	169,939	17,308 00	
.....	47,150	90,003	.....	.....	67,153	98,575 75	
.....	1,815,567	.....	.....	.....	1,915,567	607,783 50	
.....	1,980,399	361,174	.....	.....	2,321,496	1,070,454 50	
.....	2,908 000	144,000	.....	.....	2,352,000	1,140,000 00	
.....	751,192	197,444	943,587	.....	1,691,153	501,680 70	
.....	1,305,797	916,851	1,196,519	.....	2,709,160	985,762 45	
.....	1,550,573	64,080	100,000	.....	1,793,653	805,806 50	
.....	1,691 900	17,800	440,000	.....	2,152,000	985,550 00	
.....	3,504,954	.....	.....	.....	3,504,954	1,752,477 00	
.....	2,943,166	168,000	510,000	.....	3,621,166	1,564,583 50	
.....	4,004 180	.....	.....	.....	4,004,180	2,002,090 00	
.....	5,493,400	4,000	1,915,000	.....	6,712,400	2,869,300 00	
.....	3 075,300	109,000	125,000	.....	3,302,900	1,575,600 00	
.....	3,712,156	.....	770,000	1,230,000	5,712,156	1,994,578 00	
.....	4,764,800	.....	510,000	1,940,000	6,514,800	2,495,400 00	
.....	5,673,660	398,000	771,350	1,242,700	8,285,710	3,175,600 00	
.....	4,797,000	390,000	592,500	965,000	6,604,500	2,579,000 00	
.....	5,906,000	156,000	485,000	1,370,000	7,917,000	2,750,000 00	
.....	6,412,004	986,000	635,000	1,480,000	8,613,004	3,415,002 00	
.....	5,338,006	1,952,000	1,410,000	2,760,000	11,474,006	3,443,003 00	
1,000	6,546,300	475,000	1,190,000	1,900,000	10,109,500	3,606,100 00	
.....	3,699,830	952,400	1,049,000	2,276,000	7,900,930	2,696,010 00	
.....	3,546,000	879,000	1,992,500	2,255,000	8,665,500	2,993,000 00	
300	2,334,561	491,146	1,053,115	1,069,150	5,948,973	1,949,136 00	
61,005	1,435,008	198,137	1,358,580	1,344,085	4,396,805	1,028,603 00	
173,080	310,000	190,000	1,692,500	1,150,000	3,375,500	977,750 00	
194,618	2,012,764	88,000	1,897,500	815,000	4,987,669	1,442,500 00	
165,109	2,844,000	645,600	1,370,000	1,165,000	7,169,700	2,443,750 00	
90,000	1,766,000	421,900	72,500	430,000	2,709,700	1,037,050 00	
599,000	599,000	992,000	1,755,000	1,564,000	4,854,500	803,900 00	
110,600	2,910,000	510,000	31,300	97,000	2,999,900	1,347,590 00	
140,750	1,156,000	734,000	945,000	1,374,000	3,549,750	990,450 00	
2,330,300	108,101,396	10,644,109	94,950,095	35,892,478	171,138,391	62,746,911 00	

AMOUNT OF COINAGE AT THE UNITED STATES MINT—CONTINUED.

COPPER COINAGE.

Total copper coinage.			Years.	Total copper coinage.		
Number. Pieces.	Value. Dolls. Cts.	Number. Pieces.		Value. Dolls. Cts.		
: } : } : }	1,208,567	11,373 00	1812.....	1,075,500	10,755 00	
			1813.....	418,000	4,180 00	
			1814.....	357,830	3,578 30	
....	1,090,180	10,324 40	1815.....			
....	1,004,558	9,510 34	1816.....	2,820,982	28,209 82	
....	979,700	9,797 00	1817.....	3,948,400	39,484 00	
....	916,752	9,106 68	1818.....	3,167,000	31,670 00	
....	3,033,705	29,279 40	1819.....	2,671,000	26,710 00	
....	1,362,837	13,628 37	1820.....	4,407,550	44,075 50	
....	3,449,466	34,422 83	1821.....	389,000	3,890 00	
....	2,569,353	25,203 03	1822.....	2,072,339	20,733 39	
....	1,812,180	12,844 94	1823.....			
....	1,755,580	13,493 48	1824.....	1,262,000	12,620 00	
....	704,000	5,260 00	1825.....	1,524,100	14,926 00	
....	1,203,221	9,652 21	1826.....	1,751,425	16,344 25	
....	1,509,000	13,090 00	1827.....	2,357,732	23,577 32	
....	1,377,439	8,001 53	1828.....	2,866,624	25,636 24	
....	1,673,800	15,660 00	1829.....	1,901,500	16,580 00	
....	281,165	2,495 95	1830.....	1,711,500	17,115 09	

AMOUNT OF COINAGE AT THE MINT OF THE UNITED STATES—CONTINUED.

COPPER COINAGE—CONTINUED.

Years.	Total copper coinage.		Years.	Total copper coinage.	
	Number. Pieces.	Value. Dolla. Cts.		Number. Pieces.	Value. Dolla. Cts.
1831.....	3,361,460	33,603 60	1841.....	1,597,367	15,973 62
1832.....	2,362,000	23,620 00	1842.....	2,383,390	23,833 90
1833.....	2,893,000	28,160 00	1843.....	2,428,320	24,283 20
1834.....	1,975,100	19,151 00	1844.....	2,397,752	23,977 52
1835.....	4,019,400	39,489 00	1845.....	3,894,804	38,948 05
1836.....	2,509,000	23,100 00	1846.....	4,120,800	41,208 00
1837.....	5,558,300	55,583 00	1847.....	6,183,669	61,836 69
1838.....	6,370,200	63,702 00			
1839.....	3,128,661	31,286 61	Total	118,279,478	1,145,591 21
1840.....	2,462,700	24,627 00			

AMOUNT OF COINAGE AT THE MINT OF THE UNITED STATES—CONTINUED.

TOTAL COINAGE.

Years.	Number. Pieces.	Value.		Years.	Number. Pieces.	Value.	
		Dolla.	Cts.			Dolla.	Cts.
1793... }	1,834,420	453,541	80	1822.....	3,813,788	915,509	69
1794... }				1823.....	2,166,485	967,975	00
1795... }				1824.....	4,786,894	1,859,297	00
1796.....	1,219,270	192,129	40	1825.....	5,178,760	1,735,894	00
1797.....	1,095,165	125,524	29	1826.....	5,774,434	2,110,679	25
1798.....	1,368,241	545,698	00	1827.....	9,097,845	3,024,342	32
1799.....	1,365,651	645,906	68	1828.....	6,196,853	1,741,391	24
1800.....	3,337,972	571,335	40	1829.....	7,674,501	2,306,875	50
1801.....	1,571,390	510,956	37	1830.....	8,357,191	3,155,620	00
1802.....	3,615,869	516,075	83	1831.....	11,792,284	3,923,473	60
1803.....	2,780,830	370,698	53	1832.....	9,128,387	3,401,055	00
1804.....	2,046,839	371,827	94	1833.....	10,307,790	3,765,710	00
1805.....	2,260,361	333,239	48	1834.....	11,637,643	7,388,423	00
1806.....	1,815,409	801,084	00	1835.....	15,996,342	5,668,667	00
1807.....	2,731,345	1,044,595	96	1836.....	13,719,333	7,764,900	00
1808.....	2,935,858	982,055	04	1837.....	13,010,721	3,299,898	00
1809.....	2,861,834	884,752	53	1838.....	15,336,518	3,979,217	00
1810.....	3,056,418	1,155,868	50	1839.....	9,260,345	3,021,170	11
1811.....	1,649,570	1,108,740	95	1840.....	7,053,084	2,260,667	50
1812.....	2,761,646	1,115,219	50	1841.....	5,051,831	1,304,198	67
1813.....	1,755,331	1,102,271	50	1842.....	7,483,180	2,426,351	50
1814.....	1,833,859	612,435	80	1843.....	10,405,233	6,530,043	20
1815.....	69,867	20,483	00	1844.....	5,460,967	2,843,447	53
1816.....	2,888,135	56,785	57	1845.....	9,283,607	3,416,800	54
1817.....	5,163,967	647,267	50	1846.....	7,447,335	3,623,443	00
1818.....	5,537,084	1,345,064	50	1847.....	11,545,273	14,348,366	69
1819.....	5,074,723	1,425,325	00				
1820.....	6,492,509	1,864,786	20	Total	299,229,601	116,635,153	11
1821.....	3,139,249	1,018,977	45				

By an Act of Congress of February, 1793, all foreign gold and silver coins, (except Spanish milled dollars, and parts of dollars,) which were received for moneys due to the United States, were required to be coined anew previous to their circulation; and under this Act the amount received at the Philadelphia Mint, during the year 1847, was \$9,829,404.

Since all value is regulated by the standard of gold and silver, it may be proper to exhibit a few general facts respecting their production in different parts of the globe. It appears that for three centuries the greater part of the gold and silver which was used by civilized nations was drawn from America—Mexico and Peru yielding the largest amount of silver, and New Granada, Brazil, and Chili the largest amount of gold. The production of the precious metals in Mexico and South America, during the last thirty years, has decreased, in consequence, probably, of the revolutions which have convulsed those countries; while within that period the amount produced in the United States has been

greatly increased. The quantity produced in Europe and Asia has been vastly augmented since the commencement of the present century. The largest supply of gold, exceeding in amount that which is furnished from all other parts of the globe, is obtained from the Russian dominions—the ranges of the Ural and Altain Mountains containing vast depositories of the precious metals. The total amount of the production of gold in America, from its discovery to January, 1846, is estimated at \$6,810,290,000. Recent discoveries seem, moreover, to have developed extensive mines in the territory of California. By the official report of the Director of the Mint, it appears that the total amount of gold from the mines of the United States, which has been deposited for coinage in this institution, is \$12,741,653. We subjoin the following statement of the annual amount of deposits of gold at the Mint of the United States and its branches, from mines in the United States, down to the present period:—

STATEMENT OF THE ANNUAL AMOUNTS OF DEPOSITS OF GOLD FOR COINAGE AT THE MINT OF THE UNITED STATES AND ITS BRANCHES, FROM MINES IN THE UNITED STATES.

DEPOSITED AT THE UNITED STATES MINT.

Years.	Virginia.	North Carolina.	South Carolina.	Georgia.	Tennessee.	Alabama.	Various sources.	Total at the United States Mint.
1824	.....	\$5,000	.....	.....	.....	.....	.....	\$5,000
1825	.....	17,000	.....	.....	.....	.....	.....	17,000
1826	.....	20,000	.....	.....	.....	.....	.....	20,000
1827	.....	21,000	.....	.....	.....	.....	.....	21,000
1828	.....	46,000	.....	.....	.....	.....	.....	46,000
1829	\$2,500	134,000	\$3,500	.....	.....	.....	.....	140,000
1830	24,000	204,000	26,000	\$212,000	.....	.....	.....	466,000
1831	26,000	294,000	22,000	176,000	\$1,000	.....	\$1,000	520,000
1832	34,000	458,000	45,000	140,000	1,000	.....	.....	678,000
1833	104,000	475,000	66,000	216,000	7,000	.....	.....	868,000
1834	62,000	380,000	38,000	415,000	3,000	.....	.....	898,000
1835	60,400	263,500	42,400	319,900	100	.....	12,000	698,500
1836	62,000	148,100	55,200	201,400	300	.....	.....	467,000
1837	52,100	116,900	29,400	83,600	.....	.....	.....	282,000
1838	55,000	66,000	13,000	36,000	1,500	.....	200	171,700
1839	57,600	53,500	6,300	20,300	300	\$500	.....	138,500
1840	38,995	36,804	5,319	91,113	104	4,431	.....	176,766
1841	25,736	76,431	3,440	139,796	1,212	1,863	.....	248,478
1842	42,163	61,629	223	150,276	.....	5,579	13,717	273,587
1843	48,148	62,873	5,099	56,619	2,788	3,786	415	180,728
1844	40,595	194,917	11,856	30,739	2,240	12,298	2,377	295,022
1845	86,783	365,886	5,386	17,325	3,202	6,472	4,328	469,388
1846	55,538	286,105	100,641	13,601	2,642	7,542	.....	466,069
1847	67,736	99,491	1,102	10,547	2,511	2,022	.....	183,409

\$945,294 \$3,886,136 \$479,866 \$2,330,246 \$28,899 \$45,492 \$34,237 \$7,750,141

STATEMENT OF THE ANNUAL AMOUNT OF DEPOSITS OF GOLD FOR COINAGE—CONTINUED.

DEPOSITED AT THE BRANCH MINTS.

Years.	Branch mint at Charlotte, North Carolina.	Branch mint at Dahlonega, Georgia.	Branch mint at New Orleans.	Total at the branch mints.	Total deposits of U. States gold.
1838	\$127,000	\$135,700	\$700	\$263,400	\$435,100
1839	126,836	113,035	6,869	246,740	385,240
1840	124,726	121,858	3,835	249,419	526,185
1841	129,847	161,974	1,818	293,639	542,117
1842	174,508	323,372	5,630	503,510	777,097
1843	272,064	570,080	22,573	864,717	1,045,445
1844	167,348	479,794	25,036	672,178	967,900
1845	.....	498,632	20,313	518,945	1,008,337
1846	196,381	455,149	21,758	673,288	1,139,357
1847	344,054	352,366	9,256	705,676	889,085
Total	\$1,662,764	\$3,211,960	\$116,788	\$4,991,512	\$12,741,653

In concluding this paper upon the coinage of the United States, we would remark that the law to which we have referred, requiring the recoinage of all money paid here for moneys due to the government, excepting Spanish dollars and their parts, has caused a vast amount of this species of coin to be circulated. It is also, doubtless, the fact, that the coinage from our own mines will in future time be greatly augmented. The reports from the Mint show that the amount coined during the year 1847 is nearly double that of any previous year, and that there was a much greater proportion of gold to silver. The mining of gold in the southern part of the country, which has been comparatively but recently commenced, is destined, we doubt not, to be rapidly extended; and to this may be added the silver from those mines which had recently been discovered upon the shores of Lake Superior. The resources of the country in the precious metals are doubtless extensive; and it is hardly too much to allege that the visions of the early explorers of our coast, who anticipated the product of mines of gold and silver as the reward of their toil, have been already, in some small measure, realized.

DEBT AND FINANCES OF INDIANA.

The report of the Auditor of Indiana gives the following statistics of the State debt:—

Public debt 1st July, 1847, was.....	\$11,048,000 00
Surrendered up to 1st July, 1848, under the act of January, 1846.....	9,158,000 00
Outstanding.....	\$1,890,000 00
State's one-half of principal of bonds surrendered.....	4,579,000 00
State's one-half of interest on bonds with 1 per cent of principal, with one-half of the coupons added.....	1,642,617 50
Total of State's half up to July 1, 1848.....	\$6,221,617 50
Canal's one-half of principal of bonds.....	4,579,000 00
Canal's one-half of interest on bonds surrendered.....	1,351,200 00
Canal's one-half of coupons belonging to bonds.....	9,275 00
Total of canal's one-half up to July 1, 1848.....	\$5,939,475 00

The amount of the several stocks issued under the act for liquidating the public debt up to July 1, 1848, is as follows:—

5 per cent State stock.....	\$4,579,000 00
2½ “ “	1,642,617 50
5 per cent preferred canal stock.....	4,079,500 00
5 “ “ deferred “	499,500 00
2½ per cent special preferred canal stock.....	1,213,625 00
2½ “ “ deferred “	146,850 00

Total of stocks issued to July 1, 1848..... \$12,161,092 50

Of the foregoing, the State is paying interest only on her 5 per cent State stock, at the rate of 4 per cent. After the year 1853, the rate of interest on this will be 5 per cent.

After 1853, the 2½ per cent State stocks will draw interest at that rate.

The remaining stocks are thrown upon the canal, and their redemption, principal and interest, depends upon the receipts from the canal, in accordance with the provisions of the act above referred to.

The amount of interest paid on the State debt in 1847 and 1848 was \$269,770. The amount of domestic debt \$618,270, of which only \$324,820 is to be met by the State revenue. The annual revenue of the State, including a portion of previous arrearage, is \$421,748 70, being \$50,401 67 more than the year before. The semi-annual interest on the State debt was paid on the 1st of July last, the deficiency in the treasury having been made up by a loan from the Sinking Fund and the branches of the State Bank. It is designed to make up any deficiency that may exist in January and July of next year in the same way.

According to the estimate of the Auditor, after making all the ordinary expenditures

during the current fiscal year, and after redeeming the estimated amount of \$100,000 of Treasury Notes, principal and interest, there will be left applicable to the payment of the interest on the public debt \$206,000, from which deduct the loan for the interest of July, 1848, \$40,000, also the probable sum needed to pay the interest and exchanges for January, 1849, \$95,000, and the same amount for July, 1849, \$95,000, equal to \$230,000. This would leave a deficit next July of only \$24,000. This small balance, it is safe to presume, would be overcome by the increased receipts into the treasury by the 1st January following. But as the revenue is actually payable until the latter part of the winter, it is calculated that such would be the result by the 1st of July, 1850.

COINAGE OF THE BRITISH MINT.

In the Merchants' Magazine, Vol. XIX, p. 565, we published a paragraph touching the coinage of the British mint in 1847, derived from Wilmer and Smith's Liverpool Times, but purporting to be "according to a Parliamentary return." It struck us at the time that the statement was erroneous,* and we therefore gladly avail ourselves of the "*Companion to the British Almanac for 1849*"—authority that can be relied upon for a complete statement of the value arising from coinage in Great Britain during the eleven years, from 1837 to 1847, inclusive. The statements, in the paragraph referred to, regarding silver are equally exaggerated, as will be seen by the following table, derived from the British Almanac:—

STATEMENT OF THE VALUE ARISING FROM THE COINAGE DURING THE ELEVEN YEARS FROM 1837 to 1847.

Year.	TOTAL WEIGHT COINED IN EACH YEAR.			TOTAL VALUE COINED IN EACH YEAR.		
	Gold. Lbs.	Silver. Lbs.	Copper. Tons. Cwts.	Gold.	Silver.	Copper.
1837.....	26,818	23,064	22 15	£1,253,071	£76,111	£5,098
1838.....	61,110	60,960	7 00	2,855,364	101,168	1,568
1839.....	10,793	120,980	32 00	504,303	399,235	7,168
1840.....	.....	65,580	14 00	.....	216,414	3,136
1841.....	8,100	29,144	33 00	378,472	96,175	7,392
1842.....	127,919	58,440	8 00	5,977,015	204,732	1,792
1843.....	141,420	83,720	68 10	6,607,850	276,276	15,344
1844.....	76,275	189,900	36 17	3,563,949	626,670	8,207
1845.....	90,842	196,260	31 00	4,244,506	647,658	6,944
1846.....	92,775	196,560	29 00	4,334,697	559,548	6,496
1847.....	110,400	38,100	40 00	5,158,440	125,730	4,960
Total.....	746,452	1,062,708	322 2	29,886,457	2,440,614	43,743
Tons.....	373	431½	322 2	Total value.....	£38,275,486	

SILVER FROM THE CONGESBERG SILVER MINES, IN NORWAY.

From the Swedish official paper of the 27th of October, 1848, we learn that, on the 14th of September, the workmen employed in the king's mine, which is one of the Congesberg silver mines, in Norway, found a lump of pure native silver, weighing 208 pounds; and that, on the 6th October, another lump of native silver, equally pure in quality, of no less weight than 436 pounds, was dug out of the same mine. It is a fact worthy of being recorded, that about twenty years ago this mine was offered for sale in London for the sum of £10,000; but the capitalists of that day had not sufficient confidence in the treasures it was represented to possess, to give this comparatively small price. Subsequently, the Norwegian government were strongly urged by the scientific of that country to work the mine at the expense and for the benefit of the state. The operations were commenced and prosecuted with vigor, and for a considerable number of years this mine has annually yielded to the government of Norway a much larger revenue than the price which could not previously be obtained in England for the mine itself.

* In the Manual issued by Eckfeldt & Duhois, of the United States Mint, in 1842, it is shown that the entire coinage of Great Britain for 25 years preceding 1841 was but £59,000,000, and that the greatest amount of gold ever coined in one year was £9,000,000.

CONDITION OF THE STATE BANK OF INDIANA.

We give below an official, summary statement of the resources and liabilities of the State Bank of Indiana on the 18th of November, 1848:—

RESOURCES.		
	1848.	1846.
Notes discounted.....	\$1,647,622 59	\$1,659,358 40
Bills of exchange.....	1,791,321 88	1,359,385 17
Suspended debt.....	412,601 91	577,667 48
Banking houses, real estate.....	382,076 71	349,787 74
United States and Indiana bonds.....	71,000 00	36,000 00
Treasury notes, State of Indiana.....	271,105 00	419,310 00
Funds in New York, Philadelphia, &c.....	394,024 72	370,383 87
Due from other banks than eastern.....	229,039 54	432,731 54
Remittances and other resources.....	231,156 03	113,577 99
Branch balances.....	148,162 39	63,534 19
Gold and silver.....	1,273,895 54	1,003,647 40
Notes of other banks.....	147,451 00	119,976 30
Total.....	\$6,997,937 31	\$6,510,289 76
LIABILITIES.		
Capital stock of State of Indiana.....	\$982,404 27	\$935,854 27
“ individuals.....	1,100,506 32	1,147,970 10
Surplus fund to cover losses.....	527,799 32	413,563 33
Profit and loss.....	105,690 76	29,954 91
Suspended interest, &c.....	19,763 98	.....
Dividend undrawn.....	21,581 85	.....
Due to banks.....	82,292 96	47,886 48
Branch balances.....	71,417 20	73,309 12
Due sinking fund and canal trustees.....	80,265 69	89,535 36
Due school fund for tax.....	1,380 23	2,861 00
Due depositors.....	452,624 73	409,989 13
Notes in circulation.....	3,708,031 00	3,336,503 00
Less notes on hand.....	155,821 00	.....
Total.....	\$6,997,937 31	\$6,510,289 76

JAMES M. RAY, *Cashier.*

STATE BANK OF INDIANA, Indianapolis, Dec. 2, 1848.

MASSACHUSETTS SAVINGS BANKS.

There are in Massachusetts forty-one institutions for savings. The returns of these institutions are made up to the 30th of September, 1848, and show the following aggregates:

Number of depositors.....	69,894
Amount of deposits.....	\$11,970,447 64
Public funds.....	1,372,622 00
Loans on public funds.....	25,600 00
Bank stock.....	2,025,721 91
Loans on bank stock.....	173,740 00
Deposits in banks bearing interest.....	91,862 44
Railroad stock.....	89,527 99
Loans on railroad stock.....	309,925 00
Invested in real estate.....	92,935 10
Loans in mortgage of real estate.....	4,171,483 67
“ to county or town.....	1,424,066 56
“ on personal security.....	2,410,171 60
Cash on hand.....	152,964 41
Rate and amount of ordinary dividend for last year.....	461,774 88
Average annual per cent of dividend for last 5 years.....	5 68
Annual expenses of the institutions.....	36,404 96

CONDITION OF THE BALTIMORE BANKS.

CONDENSED VIEW OF THE CONDITION OF THE BANKS OF THE CITY OF BALTIMORE ON THE FIRST OF JANUARY, 1849.

	Capital. Dollars.	Inv't in stocks. Dollars.	Discounts. Dollars.	Specie. Dollars.	Circulation. Dollars.	Deposits. Dollars.
Merchants'..	1,500,000	154,983 93	1,898,245 69	272,267 49	162,225	339,164 28
Baltimore....	1,200,000	22,126 00	1,534,759 95	237,246 00	186,536	358,232 85
Union.....	916,350	19,258 00	1,223,131 42	136,893 00	147,539	306,907 54
Far. & Plant.	600,625	.....	1,028,596 80	238,992 79	383,357	264,889 24
Mechanics'..	590,844	6,501 53	1,011,146 61	142,995 70	189,753	428,764 59
Com. & Far.	512,560	58,231 67	857,210 61	227,710 28	162,371	351,778 78
Far. & Mer..	393,560	133,150 10	445,447 13	77,700 44	121,582	117,911 37
Chesapeake.	340,577	122,654 41	463,617 80	90,454 04	89,867	261,639 17
Marine.....	310,000	73,138 80	434,689 53	73,512 29	104,681	177,268 39
Western.....	308,280	.....	595,868 35	262,331 62	255,489	166,824 42
Franklin.....	301,850	17,183 50	304,203 32	22,507 46	48,778	54,516 18
Total...	6,974,646	607,227 94	9,797,417 21	1,781,911 11	1,852,168	2,827,896 81
Jan. 1, 1848.	6,971,852	521,116 00	10,690,963 00	1,834,167 00	2,104,712	3,123,859 00
" 4, 1847.	6,969,329	647,200 00	10,082,225 00	1,814,308 00	1,986,248	3,261,999 00
" 5, 1846.	6,971,681	856,697 00	10,143,299 00	1,861,500 00	2,159,140	3,113,750 00

ASSAY OF CALIFORNIA GOLD AT THE BRANCH MINT, NEW ORLEANS.

We published, in the January number of the *Merchants' Magazine*, an official letter from R. M. PATTERSON, Director of the United States Mint in Philadelphia, to ROBERT J. WALKER, the Secretary of the Treasury, giving an account of the result of an assay of the first deposit of gold from California. We also published, in the same number, an assay made by Professor EBENEZER N. HOSFORD, of Harvard University, of a small quantity of California gold, from Feather River. It will be seen, by the following extract of a letter from WILLIAM P. HORT, Esq., dated Mint of the United States, New Orleans, December 29d, 1848, that that gentleman, an official of the New Orleans Branch Mint, has made an assay of six ounces of the California gold, which resulted as follows:—

On the 25th November I assayed about six ounces of the said gold, deposited in the form of dust, by T. A. Minard, and when melted and assayed, the total proved to be 895.

Our standard is 900 thousandths, 21.600 carats, \$18 60.

Theirs, 895 " 21.480 " 18 50.

The loss in melting 92 oz. 37 dwt., was 1 oz. 63 dwt., or 2 61 per cent. I know no reason why this result should be considered extraordinary. On the 28th November I assayed Alabama gold dust of the fineness of 946 thousandths. On the 10th of the same month I assayed another specimen of 923 thousandths. In short, the title of the gold dust from that State, when well washed and unmixed, always exceeds 900 thousandths—our standard; it falls below only when the gold is alloyed with the quicksilver employed as a flux to separate it from the ore. The California lot of gold was in the form of flat spangles; there was an alloy of 105 parts, of which 85 thousandths were estimated to be silver, and 20 thousandths mercury. This must have been a natural and not an artificial combination.

Respectfully,

WM. P. HORT, Assayer.

HOURS OF PROTEST.

In the case of King vs. Holmes & Son, lately tried in the Circuit Court at Cincinnati, it was ruled that a broker had a right to protest a draft at three o'clock on the last day of grace, although the usage of brokers in the city was to keep their offices open until five o'clock, P. M. To this charge the plaintiff excepted, and will take the case to the Supreme Court. On this decision the New Orleans *Commercial Bulletin* remarks:—"Where a draft or note is held by a bank, the rule and custom is not to protest it until after bank hours; but we think there is no doubt, that a private holder of a bill or note can demand payment at any time during business hours of the day it matures, and to protest it forthwith if such payment is not made."

COMMERCIAL STATISTICS.

THE LUMBER TRADE OF BANGOR, MAINE.

To FREEMAN HUNT, Esq., *Editor of the Merchants' Magazine, etc.*

DEAR SIR:—Annexed, I forward you a statement of the quantity of lumber surveyed at Bangor for the season of 1848, which will, I hope, be acceptable to you and the readers of your valuable journal.

Yours, truly,

SAMUEL HARRIS.

BANGOR, ME., December 22, 1848.

LUMBER SURVEYED AT BANGOR, ME., DURING THE YEAR 1848.

Surveyors.	Boards, Dims, Plank, Joist, &c.	Ton Timber. Tons. 40ths.	Receipt Timber.
D. Kimball.....	8,790,059	.....	.....
J. Allen.....	10,906,358	.....	.....
J. Lincoln.....	6,176,450	1,304 15	112,184
M. Fisher.....	7,479,796	201 12	984
N. Pierce.....	7,053,774	440 27	9,422
J. C. Young.....	11,597,674	.....	.....
G. Hammatt.....	10,786,387	68 10	101
M. Webster.....	11,106,504	26 13	.....
J. Short.....	5,491,659	.....	.....
J. Norris.....	12,060,883	.....	.....
A. Pratt.....	8,985,370	.....	.....
J. Young.....	12,186,524	.....	.....
J. Oakes.....	4,571,176	78 16	29,245
A. Smith.....	7,710,140	.....	.....
A. Young.....	10,223,360	.....	.....
H. Fisher.....	5,259,986	78 16	5,521
W. T. Pearson.....	10,862,401	12 04	7,625
H. Atkins.....	3,048,948	.....	.....
J. Webster.....	7,886,932	.....	.....
S. Emery.....	6,890,074	.....	.....
E. H. Burr.....	2,607,358	.....	.....
M. T. Burbank.....	2,777,461	.....	.....
Z. Rogers.....	3,274,729	.....	.....
B. Goodwin.....	3,784,206	.....	.....
J. McFaden.....	382,602	.....	.....
N. B. Wiggin.....	9,161,633	.....	.....
P. Haines.....	6,304,322	781 05	16,095
L. B. Ricker.....	6,311,777	.....	.....
M. Rowe.....	1,228,845	.....	.....
T. F. Rowe.....	790,029	.....	.....
J. Chamberlain.....	3,115,303	.....	.....
C. W. Pierce.....	4,119,780	.....	.....
Total.....	212,932,499	2,990 38	181,137

SHIP-BUILDING IN PORTLAND.

The number of vessels of each class built in the Portland (Maine) district during the last four years, has been—

	1846.	1846.	1847.	1848.		1846.	1846.	1847.	1848.
Ships.....	2	3	11	8	Sloops.....	...	1	1	...
Barks.....	14	22	18	16	Steamboats..	...	...	...	1
Brigs.....	14	12	8	13					
Schooners..	11	11	12	7	Total.....	41	49	50	45

Of the 12,252 tons built in 1848, all but about 2,000 are owned in that district.

TRADE AND COMMERCE OF BALTIMORE IN 1848.

In reference to the external character which the city and port of Baltimore have assumed during the year 1848, its buildings and commercial marine are favorable, as the editor of *Lyford's "Commercial Journal"* infers, from the fact that 1,920 buildings were erected, of which 1,635 were of brick and within the limits of direct taxation. This has been a greater increase than for any other previous year.

To her commercial marine have been added 69 vessels, not numerically so large as in other years, but the amount of tonnage exceeded any previous year from the more large vessels that were built. The following shows the result:—

	AMERICAN VESSELS ARRIVED.				AMERICAN VESSELS CLEARED.			
	Ships.	Barks.	Brigs.	Sch'ns.	Ships.	Barks.	Brigs.	Sch'ns.
Swedish West Indies.....	...	...	...	...	...	...	1	...
Danish West Indies.....	...	1	4	6	...	3	5	16
Holland.....	8	1	...	...	12	2	...	...
Hanse Towns.....	3	7	...	...	2	...	...	...
England.....	21	.	...	...	30	14	1	...
Ireland.....	1	1	...	...	3	8	5	...
British Guiana.....	...	3	2	1	...	2	8	4
British West Indies.....	...	1	22	28	...	3	55	55
British North American cols..	...	1	3	4	...	2	8	9
France.....	...	1	...	...	4	1	1	...
French West Indies.....	...	.	1	...	...	...	2	3
Haiti.....	...	.	...	1	1	...	2	2
Cuba.....	...	2	31	26	...	2	5	5
Other Spanish West Indies...	...	.	...	...	...	3	20	14
Porto Rico.....	...	4	39	23	...	3	20	14
Venezuelian ports.....	...	1	6	11	...	1	7	6
Brazilian ports.....	2	32	27	2	1	27	39	15
Monte Video.....	...	4	3	...	...	7	1	1
Chilian ports.....	...	1	...	...	1	3	1	...
Peruvian ports.....	...	2	1	...	...	...	2	...
Africa.....	...	2	...	1	...	2	1	2
Honduras.....	...	1	...	5	...	...	...	2
New Grenada.....	...	4	...	...	...	...	1	1
Sicily.....	...	4	...	...	...	...	...	...
Madeiras.....	...	.	...	...	...	...	2	...
Portugal.....	1	.	...	...	...	...	...	...
Spain.....	...	.	1	3	...	...	...	...
Gibraltar.....	...	.	...	...	...	...	1	2
Mexico.....	...	.	...	...	...	...	1	...
Total.....	36	69	139	115	53	80	168	137

FOREIGN VESSELS ARRIVED AND CLEARED AT BALTIMORE.

	VESSELS ARRIVED.				VESSELS CLEARED.			
	Ships.	Barks.	Brigs.	Sch'ns.	Ships.	Barks.	Brigs.	Sch'ns.
British.....	3	1	40	31	4	2	41	34
Hanseatic.....	17	5	4	...	21	8	6	...
Hanoverian.....	1	.	1	...	1	.	1	...
Dutch.....	...	.	1	...	...	.	...	...
French.....	1	.	2	...	2	.	1	...
New Granadian.....	...	.	...	1	...	.	...	1
Danish.....	1	.	2	...	1	1	...	1
Venezuelian.....	...	1	...	...	...	1	...	...
Swedish.....	...	.	...	...	...	.	1	...
Russian.....	...	.	...	...	1	.	...	...
Total.....	23	7	50	32	30	12	51	36
Add American.....	36	69	139	115	53	80	168	137
" coastwise.....	42	166	233	974	...	...	...	...
Total.....	101	242	422	1,121	83	92	219	173

EXPORTS OF DOMESTIC PRODUCE FROM THE PORT OF BALTIMORE TO EACH FOREIGN PORT IN 1848

The following table, prepared expressly for the "*Commercial Journal and Lyford's Price Current*," comprises the names of all the foreign ports to which all the principal articles of domestic produce were exported from the port of Baltimore during the year 1848:

TO SWEDISH WEST INDIES.					
Beef.....bbls.	15	Butter.....lbs.	2,650	Indian meal .bbls.	448
Pork.....bbls.	88	Flour.....bbls.	1,234	Biscuit.....	90
Lard.....lbs.	3,682	Indian corn..bush.	282		
DANISH WEST INDIES.					
Beef.....bbls.	504	Butter.....lbs.	22,827	Indian meal .bbls.	3,584
Pork.....bbls.	311	Cheese.....	19,333	Biscuit.....	475
Bacon.....lbs.	22,664	Flour.....bbls.	23,353	"	kegs 329
Lard.....bbls.	68,004	Indian corn..bush.	2,294	Rice.....	trcs. 149
HOLLAND.					
Bacon.....lbs.	8,750	Flour.....bbls.	246	Cotton.....lbs.	90,890
Lard.....bbls.	116,953	Tobacco.....hhds.	12,071		
BELGIUM.					
Tobacco.....				hhds.	131
HANSE TOWNS.					
Beef.....bbls.	440	Lard.....lbs.	159,617	Rice.....	trcs. 30
Pork.....bbls.	1,436	Flour.....bbls.	96	Tobacco.....	hhds. 13,918
Bacon.....lbs.	31,340				
ENGLAND.					
Beef.....bbls.	14,001	Cheese.....lbs.	136,610	Indian meal .bbls.	3,012
Pork.....bbls.	27,353	Wheat.....bush.	139,275	Tobacco.....	hhds. 280
Bacon.....lbs.	8,250,688	Flour.....bbls.	70,701	Cotton.....	lbs. 53,053
Lard.....bbls.	2,255,949	Indian corn..bush.	376,393		
IRELAND.					
Beef.....bbls.	205	Cheese.....lbs.	11,813	Indian corn..bush.	304,730
Pork.....bbls.	2,188	Wheat.....bush.	33,778	" meal .bbls.	3,723
Bacon.....lbs.	278,194	Flour.....bbls.	5,383	Biscuit.....	714
Lard.....bbls.	239,569				
GIBRALTAR.					
Flour.....bbls.	1,197	Biscuit.....bbls.	40	Rice.....	trcs. 10
Indian corn..bush.	6,505	"	kegs 20	Cotton.....	lbs. 80,313
BRITISH GUIANA.					
Beef.....bbls.	295	Butter.....lbs.	10,597	Indian meal .bbls.	2,650
Pork.....bbls.	1,072	Cheese.....	8,888	Biscuit.....	1,619
Bacon.....bbls.	3,769	Flour.....bbls.	10,665	Rice.....	trcs. 55
Lard.....bbls.	17,814	Indian corn..bush.	2,982	Tobacco.....	hhds. 11
BRITISH WEST INDIES.					
Beef.....bbls.	1,173	Cheese.....lbs.	88,357	Biscuit.....bbls.	6,654
Pork.....bbls.	5,446	Wheat.....bush.	988	"	kegs 1,080
Bacon.....lbs.	106,834	Flour.....bbls.	81,865	Rice.....	trcs. 674
Lard.....bbls.	184,294	Indian corn..bush.	60,685	Tobacco.....	hhds. 90
Butter.....bbls.	211,792	" meal .bbls.	24,446		
BRITISH NORTH AMERICAN COLONIES.					
Beef.....bbls.	228	Cheese.....lbs.	2,134	Indian meal .bbls.	8,898
Pork.....bbls.	1,909	Wheat.....bush.	11,548	Biscuit.....	2,891
Bacon.....lbs.	90,469	Flour.....bbls.	30,366	Rice.....	trcs. 10
Butter.....bbls.	43,963	Indian corn..bush.	9,974		
FRANCE.					
Tobacco.....	hhds.	5,661	Cotton.....	lbs.	64,197

FRENCH WEST INDIES.

.bbls.	341	Cheese.....lbs.	546	Indian corn..bush.	450
...lbs.	4,386	Flour.....bbls.	3,032	Rice.....trcs.	89
.....	1,489				

HAYTI.

bbls.	8	Lard.....lbs.	11,573	Flour.....bbls.	1,193
.....	25	Butter.....	1,903	Rice.....trcs.	3
...lbs.	1,636	Cheese.....	4,355	Tobacco....hhds.	8

CUBA.

.bbls.	41	Butter.....lbs.	6,194	Indian meal..bbls.	25
.....	92	Cheese.....	2,848	Biscuit.....	146
...lbs.	15,455	Flour.....bbls.	963	Rice.....trcs.	157
.....	24,667				

PORTO RICO.

.bbls.	23	Cheese.....lbs.	39,750	Biscuit.....bbls.	819
.....	1,225	Flour.....bbls.	6,980	" kegs	1,476
...lbs.	42,936	Indian corn..bush.	139	Rice.....trcs.	418
.....	207,054	" meal..bbls.	2,972	Tobacco....hhds.	12
.....	45,187				

VENEZUELIAN PORTS.

.bbls.	77	Cheese.....lbs.	9,413	Biscuit.....bbls.	76
.....	50	Flour.....bbls.	10,442	" kegs	50
...lbs.	10,154	Indian corn..bush.	1,608	Rice.....trcs.	171
.....	77,685	" meal..bbls.	1,574	Tobacco....hhds.	40
.....	16,494				

BRAZILIAN PORTS.

.bbls.	265	Butter.....lbs.	5,330	Indian meal..bbls.	200
.....	142	Cheese.....	4,252	Biscuit.....	84
...lbs.	104,665	Flour.....bbls.	131,442	" kegs	279
.....	191,794	Indian corn..bush.	400	Tobacco....hhds.	62

MONTE VIDEO.

.bbls.	20	Butter.....lbs.	12,658	Biscuit.....bbls.	100
.....	20	Cheese.....	608	" kegs	230
...lbs.	47,301	Flour.....bbls.	19,094	Tobacco....hhds.	25
.....	47,599				

PERUVIAN PORTS.

.bbls.	40	Lard.....lbs.	3,432	Biscuit.....kegs.	115
.....	50	Flour.....bbls.	200	Tobacco....hhds.	18
...lbs.	6,264				

CHILIAN PORTS.

.bbls.	128	Lard.....lbs.	30,102	Flour.....bbls.	256
.....	480	Butter.....	4,538	Biscuit.....	61
...lbs.	41,587	Cheese.....	668	" kegs	325

AFRICA.

.bbls.	343	Butter.....lbs.	4,740	Biscuit.....bbls.	60
.....	163	Flour.....bbls.	434	Tobacco....hhds.	122
...lbs.	45,027	Indian meal.....	16		

HONDURAS.

.bbls.	15	Butter.....lbs.	748	Flour.....bbls.	105
.....	10	Cheese.....	1,400	Rice.....trcs.	19
...lbs.	360	Wheat.....bush.	1,017	Tobacco....hhds.	10

NEW GRANADA.

.bbls.	8	Flour.....bbls.	15	Biscuit.....kegs	50
...lbs.	202	Biscuit.....	10	Tobacco....hhds.	4
.....	183				

MADRIDA.

.....bbls.	532	Indian corn.....bush.	12,711		
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TRADE AND COMMERCE OF BOSTON FOR 1848 :

COMPARED WITH PREVIOUS YEARS.

The arrivals of shipping from foreign ports at the port of Boston for the last nine years have been as follows:—

ARRIVALS AND CLEARANCES AT BOSTON FROM 1840 TO 1848.

Years.	ARRIVALS.					CLEARANCES.				
	Ships.	Barks.	Brigs.	Sch'mrs.	Total.	Ships.	Barks.	Brigs.	Sch'mrs.	Total.
1848.....	243	310	902	1,646	3,101	159	315	887	1,449	2,810
1847.....	182	262	698	1,613	2,755	116	228	626	1,556	2,526
1846.....	146	213	531	1,172	2,052	95	192	480	1,214	1,961
1845.....	159	215	550	1,406	2,330	102	207	514	1,344	2,167
1844.....	154	217	609	1,221	2,199	92	203	520	1,166	1,961
1843.....	127	153	524	946	1,750	78	149	477	883	1,587
1842.....	172	170	498	910	1,750	93	142	440	907	1,582
1841.....	194	150	584	735	1,743	104	124	502	839	1,569
1840.....	162	117	598	771	1,648	80	87	476	694	1,337

COASTWISE ARRIVALS AND CLEARANCES OF BOSTON.

ARRIVALS.								
1848.	1847.	1846.	1845.	1844.	1843.	1842.	1841.	1840.
6,118	7,125	6,775	5,631	5,372	4,944	4,024	4,574	4,336
CLEARANCES.								
3,187	3,198	2,672	3,054	2,830	2,497	2,298	2,841	2,815

DOMESTIC EXPORTS OF BOSTON IN 1848.

There has been a good demand for export during the year, owing to the low range of prices which have prevailed, and the operations of the trade have also been to a fair extent. By the following statement, derived from the Boston *Shipping List*, it will be observed that a large portion of the exports have been to the East Indies and Valparaiso, and the total exports show a considerable increase over previous years:—

Bales and cases.			Value.			Bales and cases.			Value.		
East Indies.....	10,449	3484,250	26	Fayal.....	51	32,279	42				
Calcutta.....	4,109	197,946	26	Truxillo.....	108	10,452	77				
Canton.....	9,207	413,249	83	Cape Haytien.....	47	3,518	43				
Hong Kong.....	943	58,710	06	Gonaives.....	48	4,153	56				
Batavia.....	805	34,407	33	Jacmel.....	19	1,172	15				
Sumatra.....	100	5,562	13	Port au Prince.....	11	1,150	00				
Valparaiso.....	15,456	575,186	32	Aux Cayes.....	38	3,164	08				
Zanzibar.....	750	30,925	27	St. Thomas.....	4	218	03				
W. C. Cen. America.	1,151	34,500	00	St. Peters.....	76	4,490	87				
River la Plata.....	368	15,350	31	Bahamas.....	27	1,584	61				
Monte Video.....	150	6,666	93	Nassau.....	7	385	99				
Buenos Ayres.....	1,033	41,036	56	Surinam.....	3	256	94				
Rio Janeiro.....	1,346	67,516	65	Belize.....	70	3,888	00				
Africa.....	231	11,356	77	Turks Island.....	5	540	90				
Hobart Town.....	125	5,579	39	Mansanilla.....	4	230	00				
Sandwich Islands.....	470	43,651	95	Bermuda.....	1	50	82				
Pernambuco.....	419	19,706	20	Eleuthera.....	6	409	00				
Smyrna.....	1,102	52,426	90	Halifax.....	42	2,700	00				
Gibraltar.....	42	1,648	12	Miramachi.....	2	42	00				
Constantinople.....	7	513	67	Yarmouth.....	2	42	00				
Cape de Verd Islands.	352	18,002	46	Cumberland.....	5	239	13				
Genoa.....	50	2,400	00								
Vera Cruz.....	1,469	91,827	83	Total.....	50,952	2,266,332	84				
Sisal.....	242	12,000	94								

In 1847, exports in bales, etc., amounted to 35,010; in 1846, to 28,484; and in 1845, to 32,205.

SALES OF COTTON IMPORTED INTO BOSTON.

180,958	1843.....	151,090	1838.....	96,636	1833.....	54,139
96,932	1842.....	119,670	1837.....	82,684	1832.....	60,011
93,549	1841.....	131,860	1836.....	82,885	1831.....	53,810
87,619	1840.....	138,709	1835.....	80,709	1830.....	46,203
75,599	1839.....	94,361	1834.....	60,312		

s from this port to foreign ports for three years past have been as follows:—
ales; 1847, 6,477 bales; 1846, 7,187 bales.

RECEIPTS OF BREADSTUFFS, ETC., AT BOSTON.

	Flour. Bbls.	Corn. Bush.	Oats. Bush.	Rye. Bush.	Shorts. Bush.
.....	935,578	3,338,293	384,368	65,189	48,988
.....	1,027,719	2,584,528	521,738	50,256	83,626
.....	750,432	2,374,484	414,417	17,160	96,711
.....	730,138	2,371,406	548,583	24,184	65,530
.....	686,586	1,960,663	508,282	30,352	105,025
.....	610,964	1,540,306	468,032	25,953	40,750
.....	609,460	1,835,163	393,474	39,122	91,723
.....	574,223	2,044,129	356,502	34,128	43,047
.....	619,261	1,868,431	437,948	48,026	57,037
.....	451,667	1,607,492	439,141	48,624	52,755
.....	370,704	1,574,038	443,657	102,473	49,062

FLOUR RECEIVED AT BOSTON FROM THE WESTERN RAILROAD.

	1844.	1846.	1846.	1847.	1848.
.....	322½	2,624	11,252	21,906	15,027
.....	2,551½	3,877	4,639	20,908	9,011½
.....	1,136½	2,933	3,695	14,228	5,423
.....	2,162	5,726	3,557½	11,748½	6,947
.....	19,835	18,622	29,282	66,469	38,846½
.....	15,129	7,898	27,120	72,098½	38,838
.....	10,710½	6,673½	26,112	60,629	39,023
.....	15,257	11,046	17,624	36,803	25,386
.....	12,141	19,001	16,996	47,527	35,275
.....	22,889½	28,960	22,556	72,904	61,172½
.....	40,325	57,623	44,420	62,574	71,332½
.....	11,837½	18,061½	25,098	26,701½	18,090½
.....	154,297	183,045	232,951½	514,676½	364,372½

RECEIPTS OF TAR, TURPENTINE, OIL, AND MOLASSES, AT BOSTON.

	Tar. Bbls.	Turpentine. Bbls.	Sperm. Bbls.	Whale. Bbls.	Molasses. Hhds.
.....	19,959	23,006	107,986	290,656	77,675
.....	16,228	56,729	121,410	320,645	81,232
.....	16,542	34,728	95,217	207,493	71,595
.....	16,597	40,177	157,917	272,730	64,631
.....	14,410	41,579	139,594	262,047	77,426
.....	13,535	38,042	166,985	206,727	57,660
.....	10,911	19,610	165,637	161,041	63,675
.....	17,899	28,078	159,304	207,348	73,922
.....	12,197	26,740	157,791	207,908	78,082
.....	21,214	25,396	142,336	229,783	79,545
.....	14,107	16,362	132,356	226,552	72,267

INSPECTIONS OF POT AND PEARL ASHES FROM 1845 TO 1848.

	1847.	1846.	1846.	1846.
	Casks.	Lbs.	Casks.	Lbs.
.....	1,711	1,225 544,631	1,783	801,094
.....			1,818	793,719

IMPORTS OF COFFEE INTO BOSTON FROM 1843 TO 1848.

1847.	1846.	1846.	1844.	1848.
27,532,522	29,036,337	17,298,700	26,259,989	16,071,665

VALUE OF IMPORTS, AND DUTIES PAID AT PHILADELPHIA.

The following statement, showing the value of the imports into the port of Philadelphia, and the duties accruing thereon to the United States, as prepared from official records, is derived from the Philadelphia *Commercial List* :—

Years.	Value of imports.	Duties.	Years.	Value of imports.	Duties.
1830.....	\$9,525,893	\$3,537,516 10	1840.....	\$8,624,484	\$1,517,306 70
1831.....	11,673,755	4,372,525 98	1841.....	9,948,598	1,963,681 64
1832.....	10,048,195	3,500,292 50	1842.....	6,201,177	1,812,842 08
1833.....	11,153,757	2,985,095 50	1843.....	4,916,535	1,437,837 04
1834.....	10,686,078	3,110,477 32	1844.....	8,410,864	2,981,573 15
1835.....	11,868,529	2,501,621 43	1845.....	7,491,497	2,370,515 71
1836.....	16,116,625	3,146,458 48	1846.....	8,308,615	2,608,063 16
1837.....	10,130,838	1,820,993 21	1847.....	12,145,937	2,904,748 97
1838.....	10,417,815	2,109,955 30	1848.....	unknown.	2,762,093 11
1839.....	14,753,589	2,884,984 16			

Comparative monthly statement of the cash duties received at this port during the past three years:—

	1848.	1847.	1846.
January.....	\$374,573 98	\$218,829 49	\$223,161 61
February.....	291,277 50	210,410 10	241,794 17
March.....	247,991 98	237,457 81	207,890 13
April.....	249,778 48	275,196 73	312,593 18
May.....	179,909 79	242,273 61	481,980 00
June.....	111,117 88	161,864 77	
July.....	311,421 49	389,315 85	184,353 75
August.....	371,920 75	466,635 14	250,660 69
September.....	222,061 15	260,999 41	176,605 68
October.....	139,174 12	141,590 50	111,894 23
November.....	111,669 41	124,398 25	57,462 05
December.....	151,196 58	176,286 51	172,166 14
Total.....	\$2,762,093 11	\$2,904,748 17	\$2,420,661 70

RECEIPTS OF COTTON AT PHILADELPHIA.

The following is a statement of the amount of cotton received at the port of Philadelphia during the last four years:—

	1846.	1846.	1847.	1848.
New Orleans.....bales	6,992	12,932	13,582	17,552
Mobile.....	5,967	2,807	3,205	1,199
Savannah.....	5,974	5,804	2,575	6,882
Charleston.....	4,640	9,557	17,377	16,752
Apalachicola.....	2,741	941	864	654
Other places.....	1,216	5,404	2,824	2,140
Total.....	27,627	37,637	40,427	45,149

PHILADELPHIA EXPORTS OF FLOUR, MEAL, AND GRAIN.

We have compiled from the Philadelphia *Commercial List* the following table of the exports of wheat and rye flour, corn meal, wheat, and corn from the port of Philadelphia, annually, for the last eight years:—

Years.	Wheat flour. Bbls.	Rye flour. Bbls.	Corn meal. Bbls.	Wheat. Bushels.	Corn. Bushels.
1841.....	195,555	26,886	106,822	56,571	80,366
1842.....	161,866	22,530	97,884	87,953	83,772
1843.....	128,617	22,303	106,484	32,235	74,613
1844.....	196,433	21,904	101,356	23,375	110,068
1845.....	201,956	17,098	115,101	86,098	129,256
1846.....	366,610	19,730	144,857	245,136	279,820
1847.....	420,684	20,407	300,531	523,538	1,102,210
1848.....	179,507	15,537	140,014	207,092	817,061

INSPECTION OF TOBACCO AT PHILADELPHIA.

following statement of the Annual Inspection of Tobacco at the port of Philadelphia from 1832 to 1848, excepting in 1837 and 1838, during part of which time there was no tobacco received, and of which no account was kept, is derived from the "*Philadelphia Commercial List*."

	Kentucky.	Ohio.	Virginia.	Maryland.	Total.	Stocks.
.....	1,456	157	96	1	1,700	.....
.....	1,386	30	592	16	2,024	.....
.....	3,075	82	437	.	3,594	.....
.....		Kinds unknown.			2,960	.....
.....	2,292	17	233	10	2,552	.....
.....	4,720	83	478	8	5,289	.....
.....	5,136	138	901	65	6,240	1,178
.....	3,209	67	964	.	3,540	1,168
.....	6,299	236	198	.	6,733	3,260
.....	4,552	125	41	.	4,718	2,511
.....	4,151	31	..	.	4,182	2,511
.....	2,292	206	89	.	2,587	2,674
.....	5,463	470	..	1	5,934	3,090
.....	2,868	50	300	.	3,218	1,355

stock of tobacco in warehouse on the 1st of January, 1849, was 1,355 hogsheads; y, 1,134 hhds. Kentucky, 50 hhds. Ohio, and 171 hhds. Virginia.

INSPECTIONS OF QUERCITRON BARK AT PHILADELPHIA.

W. Ryan, Esq., of Philadelphia, furnishes the following statement of the amount quercitron bark inspected at that port during the year 1848, to which C. G. Childs, of the *Commercial List*, adds the amount inspected annually since 1832:—

Hhds.	Tons.	Bbls.	Years.	Hhds.	Tons.	Bbls.
2,233	3	159	1841.....	5,437	84	5
3,414	1	169	1842.....	3,852	25	11
3,230	45	414	1843.....	2,173	27	1
3,689	126	127	1844.....	2,879	5	1
3,648	8	128	1845.....	2,889	26	.
4,109	10	7	1846.....	2,826	4	.
5,724	60	45	1847.....	4,161	54	38
8,636	572	124	1848.....	3,241	331	8
7,118	213	12				

PHILADELPHIA GRAIN MEASUREMENTS.

following table, showing the quantity of grain, including wheat, rye, corn, barley, oats, seeds, beans, coal, salt, annually, for the last eleven years, is derived from statements of the Public Measurers in Philadelphia:—

Wheat.	Corn.	Rye.	Barley.	Oats.	Seeds.	Beans.	Coal.	Salt.	Meat.
Bush.	Bush.	Bush.	Bush.	Bush.	Bush.	Bush.	Bush.	Bush.	Bush.
319,513	593,296	163,085	48,169	272,104	22,944	1,401	138,712	356,407	7
449,960	455,370	115,933	48,152	302,274	11,593	327	86,452	291,568	5
770,905	602,858	133,891	36,542	298,473	18,248	698	165,740	257,143	1
467,943	781,278	51,371	44,336	167,508	19,704	3,040	118,108	326,132	1
462,770	492,951	36,334	35,978	194,908	25,198	1,616	9,068	151,250	1
694,384	518,671	68,013	20,012	372,713	27,773	1,580	131,909	174,134	1
596,667	640,459	95,227	58,600	375,578	42,358	1,402	97,000	217,815	1
792,502	768,486	85,357	46,630	357,677	31,434	3,930	261,838	146,451	1
903,923	665,178	30,829	40,339	350,942	15,864	3,895	348,261	237,463	1
947,596	1,093,264	78,972	38,210	369,171	7,528	676	268,760	246,438	1
922,694	1,202,318	46,900	62,554	327,733	9,770	459	357,827	200,474	1

VESSELS AND PASSENGERS ARRIVING AT NEW YORK IN 1848.

According to a statement made by Mr. Thorne, the boarding officer attached to the United States Revenue Department, it appears the number of vessels and passengers arriving at the port of New York from foreign countries during the year were as follows:—

Countries.	Ships.	Barks.	Brigs.	Galliot.	Sch'ners.	St. Ships.	Total.
American.....	552	423	670	...	274	17	1,335
British.....	138	160	260	...	164	36	754
French.....	14	15	16	...	2	1	48
Bremen.....	17	45	31	2	3	...	98
Swedish.....	2	15	23	...	4	...	44
Norwegian.....	1	10	16	...	3	...	30
Hamburgh.....	7	15	9	...	...	...	31
Danish.....	5	5	14	...	1	...	25
Dutch.....	...	6	7	...	...	...	13
Belgian.....	2	9	3	...	...	...	14
Portuguese.....	...	...	11	...	1	...	12
Prussian.....	1	6	2	...	2	...	11
Spanish.....	...	3	2	...	...	1	6
Austrian.....	...	2	...	...	...	...	2
Hanover.....	...	1	3	...	2	...	6
Sicilian.....	...	2	1	...	...	...	3
Russian.....	...	1	1	...	...	...	2
Oldenburgh.....	...	...	3	...	3	...	6
Neapolitan.....	...	...	1	...	...	...	1
Genoese.....	...	1	3	...	...	...	4
Brazilian.....	...	1	4	...	...	...	5
Oriental.....	...	1	...	...	1	...	2
Venezuelian.....	...	...	...	...	1	...	1
Sardinian.....	...	2	1	...	...	...	3
Knyphausen.....	1	...	...	...	...	...	1
Lubec.....	...	1	...	...	...	...	1
Granadian.....	...	2	2	...	4	...	8
Total.....							3,060

The annexed schedule shows the number of vessels and passengers arrived at the port of New York in each year since 1834:—

Years.	No. of arrivals.	No. of passengers.	Years.	No. of arrivals.	No. of passengers.
1835.....	2,094	35,303	1842.....	1,960	74,949
1836.....	2,291	60,541	1843.....	1,832	46,302
1837.....	2,071	57,975	1844.....	2,208	61,002
1838.....	1,790	25,581	1845.....	2,044	82,960
1839.....	2,159	48,152	1846.....	2,293	115,230
1840.....	1,953	62,797	1847.....	3,147	166,110
1841.....	2,118	57,337	1848.....	3,060	191,909

From this it appears that the number of arrivals during the last year is 87 less than in 1847, but 767 greater than in any previous year. The tonnage is probably greater than in 1847. The proportion of American to foreign vessels arrived is greater than in 1847—the American being only 11 less than in that year, and the foreign 76 less. The number of British vessels is 18 more than in 1847; French 15 less, Swedish 18 less, Bremen 6 more, Dutch 29 less, Belgian 8 less, Spanish 10 less, &c.

The number of passengers arrived during the past year, chiefly immigrants, 25,799 more than in 1847, and more than double that of any previous year. The number of passengers arrived in the country at large during the year 1847 was about 250,000. During the past year (1848) it was nearly 300,000.

[F] For a tabular statement of the value of the imports of specie, free and dutiable merchandise, and of the exports of specie, and foreign and domestic merchandise from the port of New York for each month of the years 1847 and 1848, see "Commercial Chronicle and Review," p. 195, of the present number of the Merchants' Magazine.

IMPORT OF VIRGINIA TOBACCO INTO THE PORT OF NEW YORK.

We are indebted to CHARLES M. CONNALLY, Esq., of the Virginia Tobacco Agency in New York, for the following statement of manufactured tobacco imported into the port of New York from the 1st of January to the 31st of December, 1848:—

IMPORTS AND STOCKS ON HAND IN 1848.

	Number of packages.	Same time last year.	Probable stock now on hand.	Same time last year.
From Richmond.....	62,476	75,817	.....	.....
Petersburgh.....	46,796	53,586	.....	.....
Norfolk.....	495	730	.....	.....
Other places.....	3,669	7,918	.....	.....
Total.....	113,336	138,051	30,000	36,000

RECEIPTS IN FORMER YEARS FROM 1ST JANUARY TO 31ST DECEMBER IN EACH YEAR.

Years.	Packages.	Years.	Packages.	Years.	Packages.
1839.....	51,579	1842.....	62,366	1845.....	105,689
1840.....	63,805	1843.....	61,676	1846.....	112,118
841.....	84,779	1844.....	97,536	1847.....	138,051

IMPORTS OF COAL INTO THE UNITED STATES:

UNDER THE TARIFFS OF 1842 AND 1846.

The following is a statement exhibiting the quantity and value of coal imported under the tariffs of 1842 and 1846, together with the amount of duty which accrued on the same, prepared in obedience to a resolution of the House of Representatives of the 14th December, 1848:—

	Tons.	Value.	Rate of duty per ton.	Duties.
From October 1, 1842, to June 30, 1843...	41,163	\$116,312	\$1 75	\$72,035 25
Year ending June 30, 1844.....	87,073	236,963	1 75	152,377 75
“ “ 1845.....	85,776	223,919	1 75	150,108 00
“ “ 1846.....	156,853	378,597	1 75	274,492 75
From July 1 to November 30, 1846.....	66,272	157,636	1 75	114,226 00
December 1, 1846, to June 30, 1847	82,749	213,349	30 p. c.	64,004 70
July 1, 1847, to June 30, 1848.....	196,251	461,140	“	138,342 00

Note.—The tariff of 1842 commenced operating August 30, 1842; and the tariff of 1846, December 1, 1846.

SHIP-BUILDING IN NEW YORK.

The following table shows the amount of tonnage launched and remaining on the stocks for the year ending January 1st, 1849:—

	Tonnage launched.	Tonnage on stocks.
W. H. Webb's yard.....	6,770	1,850
W. H. Brown's.....	4,800	4,800
Westervelt and McKay's.....	4,590	2,900
Perrine, Paterson and Stack's.....	4,189	1,850
Jacob Bell's.....	460	3,000
Dunham and Dimon's.....	3,900	.....
Bishop and Simonson's.....	4,000	.....
Jabez Williams'.....	1,350	400
Lawrence and Sneed's.....	3,800	580
Barclay and Townsend's.....	1,240	.....
W. H. Collyer's.....	1,450	330
Total, 1849.....	36,649	15,710
Total, 1848.....	39,718	29,870
crease.....	3,609	14,160

RAILROAD, CANAL, AND STEAMBOAT STATISTICS.

TRADE AND COMMERCE OF THE NEW YORK CANALS.

We give below, in advance of the publication of the usual annual report of the Canal Commissioners, a summary statement of the quantities and estimated value of each article which came to the Hudson River, on all the canals of the State of New York during the years 1847 and 1848:—

STATEMENT SHOWING THE TOTAL QUANTITY AND THE ESTIMATED VALUE OF EACH ARTICLE WHICH CAME TO THE HUDSON RIVER, ON ALL THE CANALS DURING THE YEARS 1847 AND 1848.

	QUANTITIES.		ESTIMATED VALUE.	
	1847.	1848.	1847.	1848.
THE FOREST.				
Fur and peltry.....lbs.	556,000	557,271	\$690,150	\$695,838
<i>Product of Wood.</i>				
Boards and scantling.....feet	299,078,633	262,279,116	5,078,564	3,931,877
Shingles.....M.	101,527	104,270	405,548	338,861
Timber.....cubic feet	1,613,943	2,098,777	169,160	300,798
Staves.....lbs.	95,104,000	113,656,951	1,239,677	511,463
Wood.....cords	13,331	13,861	79,986	69,482
Ashes.....bbls.	37,538	38,229	1,135,288	1,146,870
AGRICULTURE.				
<i>Product of Animals.</i>				
Pork.....bbls.	76,179	87,830	1,104,673	967,230
Beef.....	71,266	60,570	718,344	605,700
Bacon.....lbs.	4,902,000	48,183,285	416,738	490,997
Cheese.....	40,844,000	23,298,526	2,860,354	3,029,169
Butter.....	22,724,000	3,729,997	3,408,751	3,359,391
Lard.....	4,348,000	9,925,663	434,780	761,767
Wool.....	12,044,000	8,529,331	3,599,963	2,304,046
Hides.....	172,000	174,925	21,611	17,494
<i>Vegetable Food.</i>				
Flour.....bbls.	3,952,972	3,131,095	27,057,037	17,471,401
Wheat.....bush.	4,243,832	3,116,134	5,833,901	3,677,080
Rye.....	295,119	286,919	259,950	300,310
Corn.....	6,053,845	2,953,963	5,170,970	1,834,368
Barley.....	1,523,020	1,548,197	1,279,337	1,637,903
Other grain.....	2,040,052	2,077,724	977,967	747,930
Ship stuffs.....	2,093,681	1,437,287	293,117	172,578
Peas and beans.....	106,088	75,808	106,088	75,801
Potatoes.....	108,369	115,629	51,755	58,100
Dried fruits.....bbls.	3,558,000	1,828,145	320,364	164,638
<i>All other Agricultural Products.</i>				
Cotton.....lbs.	474,000	174,700	35,498	11,356
Tobacco.....	1,228,000	350,935	150,735	43,127
Grass seed.....	3,308,000	1,667,030	231,518	116,683
Flax seed.....	4,128,000	1,763,393	103,219	35,988
Hops.....	1,948,000	1,597,342	188,179	159,685
MANUFACTURES.				
Domestic spirits.....galls.	1,693,076	1,606,131	473,651	385,471
Leather.....lbs.	5,168,000	4,538,951	965,904	608,843
Furniture.....	1,972,000	1,545,365	197,251	153,536
Bar and Pig lead.....	482,005	86,100	19,288	3,875
Bloom and bar iron.....	26,348,000	29,787,506	660,896	744,687
Pig iron.....	21,608,000	11,528,683	340,496	172,981
Iron ware.....	3,014,000	2,314,064	123,808	80,993
Domestic woollens.....	1,756,000	1,103,563	2,369,187	889,851
“ cottons.....	2,396,090	2,493,561	740,901	632,652
Salt.....bush.	382,390	343,618	133,836	106,522

OTHER ARTICLES.				
Stone, lime, &c.....lbs.	59,094,000	65,246,669	63,129	92,379
Gypsum.....	8,518,000	3,715,980	17,584	8,336
Mineral coal.....	32,580,000	48,291,417	81,453	108,356
Sandries.....	147,988,000	97,796,493	2,944,914	2,001,252

STATEMENT SHOWING THE AGGREGATES IN TONS, AND THE ESTIMATED VALUE, UNDER THE DIVISIONS SPECIFIED IN THE ABOVE TABLE.

	1847.	1848.	1847.	1848.
The forest.....tons	666,113	615,325	\$8,798,373	\$6,994,469
Agriculture.....	897,717	685,996	54,624,849	37,336,390
Manufactures.....	51,533	37,330	6,094,518	3,834,360
Merchandise.....	4,831	6,343	517,594	593,619
Other articles.....	194,090	107,527	3,127,080	2,210,623
Total.....	1,744,283	1,452,521	\$73,092,414	\$50,969,461

STATEMENT OF THE TONNAGE AND VALUE OF ALL THE PROPERTY WHICH WENT FROM THE HUDSON RIVER ON ALL THE CANALS IN 1847 AND 1848.

	1847.	1848.
Tonnage.....	288,267	333,985
Value.....	\$74,352,812	\$76,760,766

AGGREGATE MOVEMENT FROM AND TO THE HUDSON RIVER DURING THE YEARS 1847 AND 1848, AND THE AGGREGATE VALUE OF THE PROPERTY TRANSPORTED.

	1847.	1848.
Tonnage.....	2,032,550	1,814,014
Value.....	\$147,445,226	\$127,983,961

VOYAGES OF THE BRITISH MAIL STEAMERS.

STATEMENT OF THE VOYAGES MADE BY THE BRITISH ROYAL MAIL STEAMERS DURING THE YEAR 1848, SHOWING THE DATE OF THE ARRIVAL, LENGTH OF PASSAGE, PASSENGERS BROUGHT, ETC.

Names.	Day of arrival.	Passage.			Left at	Day of departure.	Passengers to	
		Days.	Liv'pool.	Halifax.			Liv'pool.	Halifax.
Caledonia....	January	4 17	27	8	1	January 15	22	8
Acadia.....	February	1 16	38	6	5	February 12	20	5
Britannia....	March	4 20	36	13	2	March 11	19	2
Caledonia....	"	27 15	26	7	14	April 5	34	4
Acadia.....	April	23 15	40	14	11	May 3	60	6
Britannia....	May	7 14	16	5	8	" 17	35	8
Caledonia....	"	21 14	42	7	7	" 31	35	5
Niagara.....	June	2 12	48	10	10	June 14	54	16
America.....	"	13 18	71	3	6	" 28	90	14
Cambria.....	"	30 12	60	7	...	July 12	41	5
Niagara.....	July	12 10	36	15	27	" 26	35	7
Europa.....	"	27 11	60	20	...	August 9	33	19
Acadia.....	August	14 15	43	12	...	" 23	8	11
Britannia....	"	26 14	36	21	4	September 6	23	6
Hibernia....	September	8 12	56	24	3	" 20	24	14
Acadia.....	"	24 14	68	21	3	October 4	22	10
Cambria....	October	6 12	66	21	...	" 18	61	17
Niagara.....	"	19 12	86	17	11	November 1	49	6
Hibernia....	November	3 12	51	5	7	" 15	12	7
Acadia.....	"	19 14	23	5	2	" 29	10	9
Britannia....	December	6 17	16	9	1	December 18	10	2
Niagara....	"	16 13	55	7	4	" 27	31	2
Total....			1,000	257	126		738	183

Average passages from Liverpool, 14 days 1 hour. The America made the shortest passage during the year, and the Britannia the longest.

SCHUYLKILL NAVIGATION COMPANY'S RATES OF TOLL ON COAL.

The following are the rates of toll charged on coal transported on the Canal and Works of the Schuylkill Navigation Company for the year 1849:—

To	From			To	From		
	Mount Carbon.	Schuylkill Haven.	Port Clinton.		Mount Carbon.	Schuylkill Haven.	Port Clinton.
Orwigsburgh . p. ton	15	12	...	Phoenixville... p. ton	60	57	48
Hamburgh.....	25	22	13	Lumberville.....	60	57	48
Mohrsville.....	35	32	23	Paulding's Dam....	50	57	48
Alhousen'.....	40	37	28	Valley Forge.....	60	57	48
Reading.....	45	42	33	Port Kennedy.....	65	62	53
Unionville.....	55	52	43	Norristown.....	65	62	53
Laurel Hill.....	55	52	43	Conshohocken.....	70	67	58
Pottstown Landing.	55	52	43	Spring Mill.....	70	67	58
Rogers' Ford.....	55	52	43	Manayunk.....	75	72	63

The toll to Philadelphia will be as follows:—

	Mount Carbon.	Sch. Haven.	Port Clinton.
March, April, and May.....	65 cents.	62 cents.	53 cents.
June, July, and August.....	75 "	72 "	63 "
September, October, Novem., and Decem.	85 "	82 "	73 "

The coal shipped from Port Carbon to the above points will be charged one and a half cent per ton more than the said rates. The charge will be made per ton of 2,240 lbs. and an allowance of five per cent will be made on the weight shipped to cover wastage.

AUBURN AND ROCHESTER RAILROAD RECEIPTS.

The earnings of the Auburn and Rochester Railroad, during 1848 to December, show a large increase over the previous year, when the gross receipts were \$395,767, and the nett receipts \$241,153, or 12 per cent on the cost of the road. The comparative receipts of 1847 and 1848 have been as annexed:—

AUBURN AND ROCHESTER RAILROAD RECEIPTS.									
1847.					1848.				
January.....	\$17,770	67	\$24,105	01	August.....	\$48,392	74	\$51,612	46
February.....	16,995	89	21,678	91	September.....	48,084	42	51,085	71
March.....	17,601	87	23,266	15	October.....	37,246	47	39,529	89
April.....	34,285	80	45,835	07	November.....	25,111	03	31,389	07
May.....	39,637	16	53,137	60					
June.....	36,832	38	39,262	28	Total.....	364,506	59	420,732	62
July.....	42,538	16	39,670	41					

Excess in eleven months of 1848, \$56,226 03—equal to 15½ per cent. The nett earnings this year promise to be about \$300,000—equal to 15 per cent on the cost of the road.

PROGRESS OF RAILROADS IN MASSACHUSETTS IN 1849.

The following railroads and sections of railroads leading towards Boston, or connecting with Boston lines, will have been opened during the year ending January 31, 1849:—

Cape Cod Railroad.....	miles	27½	Boston, Concord, and Montreal Rail'd	36
South Shore Railroad.....		11½	Passumpsic Railroad.....	40
Norfolk County Railroad.....		26	Worcester and Nashua Railroad.....	45
Milford Branch Railroad.....		12	Portland to Lewiston.....	27
Vermont and Massachusetts Railroad		35	New York and New Haven Railroad	
Connecticut River Railroad.....		11	to Harlem Railroad.....	60
Cheshire Railroad.....		37	Section of Ogdensburgh Railroad..	12
Sullivan Railroad.....		28	Stony Branch Railroad.....	14
Vermont Central Railroad.....		65	Lowell and Lawrence Railroad.....	12
Bristol Railroad.....		12		
Northern Railroad.....		4	Total miles.....	515

COMMERCIAL REGULATIONS.

APPRAISAL OF MERCHANDISE.

THE Secretary of the Treasury has issued the following circular, touching the Appraisal of Merchandise, under date of the Treasury Department, December 26th, 1848:—

Differences of practice existing in the several ports relative to the appraisement of merchandise, the following additional instructions are issued for the government of collectors, appraisers, and other officers of the customs, under the 25th section, Act 30th of August, 1841, which is in these words:—"That it shall be the duty of all collectors and other officers of the customs, to execute and carry into effect all instructions of the Secretary of the Treasury, relative to the execution of the revenue laws; and in case any difficulty shall arise as to the true construction or meaning of any part of such revenue laws, the decision of the Secretary of the Treasury shall be conclusive and binding upon all such collectors and other officers of the customs."

The interests of the country and of fair and honorable merchants, require that this Department should, by every means in its power, secure not only the revenue against loss, but should maintain such merchants in their business against sales of imported articles at diminished rates, arising from fraud or under-valuation.

To appraisers the government looks for correct valuations of foreign imports. On these officers, more than any other, does the success of the *ad valorem* depend. Their responsibilities are great, and it is expected that their efforts will not be relaxed to check every under-valuation or fraud upon the revenue by whomsoever attempted. In the strict and faithful performance of their duty, at times necessarily disagreeable, their judgment should have great weight with other officers of the revenue service, and especially with the collectors of ports, who should, in all cases, render them every aid and co-operation in their power.

The intent of the 17th section of the act of 30th of August, 1842, in the appointment of merchant appraisers, is evidently to give the merchants an opportunity to appeal from one class of appraisers to another. But it is clear that Congress did not design to relinquish the power in the government to select the merchant appraisers, to whom the case might be referred, nor to give the parties appealing any more voice in the selection of such appraisers than of any other government officers. To consult the parties concerned, or allow them a voice in the selection of merchant appraisers, would soon result in permitting the importers to control the appraisement of their own goods, and it is presumed is not permitted at any port.

Merchant appraisers should be particularly instructed, that when acting in that capacity, they are to be governed by the same rules and regulations as provided by law for the direction of regular appraisers, and are to act upon the principle that the invoice price, or even the price actually paid for an article of merchandise, is by no means a true criterion of the fair market value as prescribed by law. Adopt a contrary principle, and one who is so fortunate as to have a quantity of merchandise given him, would be entitled to receive it free of duty, or at a nominal duty, if purchased at nominal prices; and different rates would often be assessed by appraisers by articles of the same value. The fair market value intended by law, is the general or ruling price of the article "in the principal markets of the country from which the same shall have been imported." The Treasury circular of August the 7th, 1848, declares that "forced sales in foreign markets at reduced prices under extraordinary or peculiar circumstances, cannot be taken as the true market value of such goods."

To secure uniformity of action at the different ports, the merchant appraisers are to be selected, and their appraisements made in the following manner:—When the appraisers all concur, they may designate five names, or when such concurrence does not exist, the appraiser making the advance, may designate five names of impartial merchants, citizens of the United States, familiar with the value of merchandise, and of the highest credit for integrity and fair dealing, from whom it is recommended that the collector select two as the merchant appraisers, to act under the law, who shall be duly sworn as provided for in the Treasury Instructions of July 6th, 1837, omitting in the oath the name of the importer. In the notice to be sent to the appraisers selected as provided in the same instructions, the name of the importer is also to be omitted. The names of the merchant appraisers selected shall also be withheld from the importers, until such appraisers assemble for the performance of their duty, as it is important that no *ex parte* statements be per-

mitted, the sole object being to obtain a fair and disinterested examination and valuation of the merchandise. When the collector has fixed the time and place for the merchant appraisers to assemble, he will notify the importer of such time and place, but not the names of the merchant appraisers. Such importer may be present if he desires, and every proper facility should be given him for a thorough examination and ascertainment of value.

To facilitate collectors in settling their accounts, this re-appraisement should take place immediately, or at all events, not be delayed beyond six days from the time the re-appraisement is demanded, unless, in the opinion of the merchant appraisers, there are extraordinary circumstances requiring an analysis, or proof not to be procured within that period. Should such delay extend beyond ten days, a statement of the case by the collector must be forwarded to this department for its examination. The collector, in such cases, shall also call on the regular appraisers for a statement, and transmit it to the department. In all cases where the merchant appraisers assess a lower value than the regular appraisers, the collector will report to the department a full statement of the case, to be recorded here, together with the names of the merchant appraisers. He will also transmit at the same time to this department for record here, a statement, which he will obtain of the case, from the regular appraisers.

In case the merchant appraisers are at variance with each other in their appraisements, and the collector compelled according to law to decide between them, it is expected that he will, without delay, or within five days from the time the re-appraisement is made, decide the question of value; and if he adopts the lowest appraisement made, he will give the reasons for the same in his statement, to be forwarded to this department for record as directed above.

This department earnestly invites the co-operation of collectors, appraisers, and other officers of the customs, in enforcing correct valuations, and will also be glad to receive information and assistance from all honorable merchants and citizens who desire to protect the revenue, to guard the rights of the honest trader, and to insure the faithful execution of the laws. The selection of "merchant appraisers" should not be confined exclusively to those connected with foreign imports, but, when the requisite knowledge exists, should be extended so as to embrace domestic manufactures, and producers and other citizens acting as merchants, although not dealing in foreign merchandise.

In all cases where the advance by the regular appraisers is short of the penalty, they shall report to this department the names of the importer, consignee, and consignor, together with the invoice value and rate advanced.

The law requiring importers to give notice "forthwith" to the collector of a demand for re-appraisement, no such re-appraisement shall take place unless notice is given to the collector, in writing, of such demand within a period not longer than the day succeeding the notice of such appraisement, which the regular appraisers shall give in all cases as soon as the appraisement is made.

In all cases where the goods are advanced by the regular appraisers twenty per cent more than the invoice, and no re-appraisement is called for, the said appraisers, on ascertaining that fact, shall report to the collector in writing whether the interests of the government will best be promoted by taking the duty with the penalty, as prescribed by the law, or by taking the duty in kind, as authorized by the 18th section of the Act of 30th August, 1842, as enforced by the circular of this department of the 28th of November, 1846; and if the appraisers advise the duty to be required in kind, it shall so be taken by the collector. In all such cases also, when the goods are advanced by the regular appraisers twenty per cent above the invoice value, and a re-appraisement is made by the merchant appraisers, the collector shall make a statement of the duty thus ascertained and fixed by him, including the penalty, if any, to the regular appraisers, who shall thereupon report in writing to the collector whether it is the interest of the government to take the duty thus ascertained, or require the duty in kind; and if the regular appraisers advise the duty to be required in kind, it shall so be taken by the collector.

In all cases where the duty is taken in kind, it is to be thus assessed under the law according to the several schedules, viz:—If the duty be 100 per cent, the whole of the goods shall be taken; if 40 per cent, two-fifths; if 30 per cent, three-tenths; if 25 per cent, one-quarter; if 20 per cent, one-fifth; if 15 per cent, three-twentieths; if 10 per cent, one-tenth; if 5 per cent, one-twentieth; and the goods so taken in kind, are to be sold as provided in the Treasury circular of 28th of November, 1846.

These regulations, whilst protecting the revenue against fraud, or under valuations, will insure correct invoices, inducing a compliance, where necessary, with the 8th section of the Act of 30th July, 1846, and guard the interests of the fair and honorable merchant.

Whenever it is found necessary by the regular appraisers or merchant appraisers to guard against fraud or under-valuation, they will carry into effect the following provisions of the 21 section of the Act of the 10th August, 1846, declaring that "in appraising all goods at any port of the United States heretofore subjected to specific duties, but upon which ad valorem duties are imposed by the Act of the 30th July entitled 'An Act reducing the duty on imports and for other purposes,' reference be had to values and invoices of similar goods imported during the last fiscal year, under such general and uniform regulations for the prevention of fraud or under-valuation, as shall be prescribed by the Secretary of the Treasury," as enforced by circular instructions of the 11th of November, 1846, and 26th of November, 1846. The last fiscal year" designated in this section intended by Congress, was "the last year" preceding the enactment of that law, which was the fiscal year ending the 30th of June, 1846, to which reference is required by the law to values and invoices of similar goods, when necessary to prevent fraud or under-valuation.

Where goods are advanced in price by appraisement, the estimates of the per centage increase, to ascertain whether the same are liable to the penalty as provided for in the 8th section of the Act of the 30th of July, 1846, must be made only on the article so raised in price, and such additional duty and penalty must be so levied and collected. In no case will the advance be estimated on the entire invoice, except where the goods are the same in quality, description, and value, and the same advance of price is made on the like.

R. J. WALKER, *Secretary of the Treasury.*

THE POSTAL TREATY BETWEEN THE UNITED STATES AND GREAT BRITAIN.

To publish below the official notice of the Postmaster General, to the public, with instructions to Postmasters. It embraces the rates of postage established on foreign letters between the two governments, and all the regulations necessary for postmasters and the public.

NOTICE TO THE PUBLIC, AND INSTRUCTIONS TO POSTMASTERS.

A Postal Treaty has been entered into between Great Britain and the United States, regulating the correspondence between the two countries, the mail packets of each Government, and the postage charges upon an equal and reciprocal footing.

I. Letters posted or charged in the United States will be rated at half an ounce to the single letter, over a half and not exceeding an ounce as a double letter, over an ounce not exceeding an ounce and a half as a treble letter, and so on, each half ounce or fractional excess constituting a rate. In England the half ounce limits the single letter, the ounce the double letter, but on letters exceeding the ounce and not exceeding two ounces rates are charged; also, on letters exceeding two ounces and not exceeding three ounces, rates are charged; that is, two rates are imposed for each excess over an ounce.

II. The single rate to be charged on each letter posted in the United States addressed to any place in Great Britain or Ireland is 24 cents, the double rate 48 cents, the triple 72 cents, and so on according to the United States scale of progression in weight.—No. 2.

V. Like single, double, triple, &c., rates will be collected on each letter according to weight, which is posted in Great Britain or Ireland without being prepaid, and is rated at any office in the United States for delivery.

VI. Said postage on letters going to any place in Great Britain or Ireland may be prepaid, if the whole amount is tendered at the office in the United States, when mailed, at the option of the sender.

III. Newspapers may be mailed at any office in the United States to any place in the United Kingdom on the payment of 2 cents, and may, on receipt from any place in Great Britain or Ireland, be delivered at any office in the United States on payment of 2 cents. Each Government is to charge 2 cents on each newspaper. These are to be sent in bands or covers, open at the sides and ends, or to contain no manuscript whatever.

IV. On each pamphlet to be sent to any place in the United Kingdom, and on each pamphlet received therefrom, there is to be prepaid in the first place, and charged and collected in the second, one cent for each ounce in weight, or a fractional excess of an ounce. These are to be sent in bands or covers, open at the ends or sides, so as readily to be examined, and to contain no manuscript whatever.

VIII. On letters addressed to any place in British North America, not to be conveyed by sea, there shall be charged a postage equal to the United States postage and the Province postage combined; but, as this Department is yet uninformed of the British Province postage, the United States postage to the lines will be charged, and prepayment thereof required.

quired, until the details are ascertained and settled, as required by the 21st article of the Treaty. United States postage on newspapers to Canada and other British Provinces is to be prepaid.

IX. On letters to be sent to any foreign country or British possession, and mailed for that purpose to any Post Office in the Island of Great Britain, there must be prepaid, if sent by a British packet, 5 cents the single rate, and if by an American packet, 21 cents—to be doubled, tripled, &c., according to weight.

X. On letters received from foreign countries or English possessions, through the London or any other Post Office in Great Britain, to be delivered in the United States, the foreign and British postage is to be prepaid, and what remains to be collected on delivery here in such cases as simply the United States postage—5 cents, single, if brought by a British packet; 21 cents if brought by an American packet; 40 cents if such letters are delivered at San Francisco, Astoria, or any other place in the territory of the United States on the Pacific, when brought to an Atlantic port by a British steamship, and 56 cents if brought by an American steamship.

XI. On British or foreign letters received in the United States to be forwarded to the West Indies by American packets, or any place on the Gulf of Mexico, to Chagres or Panama, in the United States mails, the single postage charged will be (as the British postage and the postage arising in its transit to Great Britain must be prepaid) 12½ cents if to Havana, 20 cents if to any other place in the West Indies or on the Gulf of Mexico, or to Chagres; 30 cents if to Panama, with 16 cents added if brought to the United States from Great Britain in an American packet.

XII. Care is to be taken to see that all American postage on letters from Havana, from other places in the Gulf of Mexico, from our Pacific possessions, and from the British North American provinces, is paid in the United States before the same is dispatched by mail to Great Britain.

XIII. Newspapers for countries beyond Great Britain may be sent on the prepayment of two cents each—also pamphlets as stipulated under No. 7—and newspapers and pamphlets received from countries beyond Great Britain are to be delivered on payment of two cents for each newspaper, and one cent per ounce in weight of each pamphlet.

XIV. Postmasters are cautioned to write on their post-bills, opposite each entry of a foreign letter, newspaper or pamphlet posted by them respectively, the word "foreign," the better to enable the Postmasters of New York and Boston, and any others that may be designated, to make a separate quarterly report of the amount of foreign postage.

XV. The Postmasters of Boston and New York will be specially instructed as to the closed mails contemplated by the treaty, the mode of keeping their accounts of foreign postage, and of mailing and acknowledging receipt of foreign matter.

C. JOHNSON, Postmaster General.

POST OFFICE DEPARTMENT, January 8, 1849.

RIO JANEIRO REGULATIONS ENFORCED.

RIO JANEIRO, November 1, 1848.

A new inspector has taken charge of the custom-house, and being determined to carry out all the laws to the strict letter, has given great trouble, annoyance, and detention. Almost every vessel has been fined more or less for errors in their manifests, which are oftentimes very incorrectly made out in the United States. We would, therefore, remind our friends that two manifests are required, containing all the marks and particulars in conformity with the bills of lading; and should there be a shipping mark in addition to the manufacturer's, it would be well to obliterate the latter. The manifests should be certified by a Brazilian consul, and filled for Rio and a Market, as, without the latter clause, a vessel cannot proceed to a foreign port without paying an extra duty, or to a Brazilian port except in ballast.

The captain should carefully compare the manifest with the bills of lading on the passage, and should he discover any errors, either in quantity or marks, &c., endorse them on the manifest before delivering it to the boarding officer, acquainting him with the same. This will prevent all fines. Also endorsing a certain number of packages in dispute when there is a doubt of the quantity, is always advisable.

SEIZURE OF VESSELS AT BRITISH PORTS FOR SMUGGLING.

In answer to numerous remonstrances from merchants and ship-owners against the hardship and injustice of placing large vessels under seizure, on account of individual instances of smuggling small quantities of tobacco by sailors, and this, too, when the real culprits

were seized and made amenable to the law, the Commissioners of Customs have issued an order authorizing the principal officers of the customs at Liverpool to release any ship now legally seized—1st, whenever the contraband tobacco or liquor is found on the person of the offender; 2dly, whenever in a ship of 500 tons, or under, the quantity concealed does not exceed 20 lbs. tobacco, or five gallons of spirits; and, 3dly, when in a ship upward of 500 tons, it does not exceed 30 lbs. of tobacco, or 10 gallons of spirits. By another order, vessels from foreign ports, on arrival, and subsequently, are to be allowed from surplus stores, placed under the custom-house seal, reasonable quantities of tobacco, wines, spirits, and other stores, with the exception of segars and raw coffee; while to ships in the river, the privilege is to extend to segars.

NAUTICAL INTELLIGENCE.

GREAT CIRCLE SAILING.*

THE rules of Middle Latitude and Mercator's Sailing have been so universally followed by navigators, that until lately they have been taken as undisputed, and scarcely any one would be listened to who presumed to call their truth in question. But they are very far from being correct, and especially in long distances give erroneous results. Bowditch says (p. 66, note) that in Plane Sailing the error may be made less than any assignable quantity, and (p. 67) Mercator's Sailing is perfectly accurate; yet he gives in appendix, Prob. XVIII, a case in spherics exactly in point, which disproves these rules.

The shortest line between any two points on the earth's surface is an arc of a great circle; a north and south line everywhere, and an east and west line only on the Equator, are such arcs; an east and west line of latitude is an arc of a small circle, consequently is not the shortest line, and every other course, by compass, forms a compound spiral curve, constantly approaching the pole but never reaching it. Every case of course and distance, with the two former exceptions, is a problem in spheric trigonometry, having the same elements which astronomical calculations have, and is solved in the same manner. And *all the cases* of Plane, Parallel, Middle Latitude, and Mercator's Sailing, where courses or distances are in question, *are erroneous*.

The principle may be illustrated by stretching a thread upon a globe between any two places which will evidently lie upon the shortest line. If this line is transferred from the points of latitude and longitude which it cuts upon the globe to the corresponding points on Mercator's chart, it will form a curve, of which the straight course by chart will be the cord; yet the apparent curve is the true course and distance, and *vice versa*.

For further illustration, divide the curve into several parts, and having the latitude and longitude of each, find the distances by Mercator's or Middle Latitude rules; the sum will be much less than a single distance found by the same rules, and will be little more than that found by a spheric calculation.

The difference which may be saved in sea room between New York and Liverpool is nearly one hundred miles; between Matanilla Reef and Cape Clear about one hundred and forty; and in these instances the error in first shaping a course is over two points.

The reason why this principle has not been more generally understood and acted upon by navigators is, that it is not taught in the common books, nor has it ever been presented in such a simple manner that practical men can work it out with a common day's reckoning. A problem in spherics is to most a difficult and far off thing, only to be touched by learned professors at observatories, who construct tables and get up the Nautical Alman-

* Chart of the North Atlantic Ocean, with the Great Circle lines between the usual points of departure and arrival, intended practically to assist the navigator in shaping his shortest course. By ANDREW SCOTT. Published by D. Eggert & Sons, New York.

nac. It is for practical men that this chart is especially intended. Of convenient size, and answering all the purposes of a general chart, the Great Circle lines are drawn in such approximation that whatever the navigator's position may be upon the ocean, he will find himself near some one leading towards his destination, and he can shape his course at a glance, without going into any calculation.

PROTECTION OF SHIPS FROM DAMAGE BY LIGHTNING.

To FREEMAN HUNT, Esq., *Editor of the Merchants' Magazine.*

Since I wrote a communication under this head, published in the *Merchants' Magazine* for January, 1849, I have received a model of a mast, with a lightning plate attached, from Dr. Johnson, of Charleston, S. C., referred to by him in his communication in the December number of the *Merchants' Magazine* for 1848, and subsequently I have received from R. B. Forbes, Esq., of Boston, a small volume entitled "*Hurries on Thunder Storms*," published in London in 1843, together with a pamphlet of 64 pages, from the same author, published in London in 1847, entitled "*Remarkable instances of the protection of certain ships of Her Majesty's Navy from the destructive effects of Lightning*," &c., &c.

It is due to Dr. Johnson and to Mr. Forbes, that I should examine the matters they have placed in my hands, before I send a communication to the *Merchants' Magazine* for the February number, and as the time necessary is not at my command, I am, therefore, under the necessity of delaying the "further remarks on this subject," mentioned in the last paragraph of my January communication.

Yours, &c.

E. MERIAN.

LIGHT-HOUSE AT UNDERSTEN, IN THE BAY OF ALORNEL.

Stockholm, November 17, 1848.

The Royal Marine Board hereby announce the erection, during the past summer, of a new light-house—which was lighted for the first time on the 11th of the present month—on the rock Understen, in the Bay of Alornel, in north latitude $60^{\circ} 46'$, and longitude $37^{\circ} 4' 30''$ east of Ferroe, or $18^{\circ} 51' 45''$ east of Greenwich. In the tower, which is white, and rises (eighty feet) above the water, is placed a revolving light, which illuminates the whole horizon from N. N. W. $\frac{1}{2}$ W., East and South, to W. S. W. by the compass, and can be discerned, in clear weather, from an ordinary ship's deck, at the distance of $3\frac{1}{2}$ German (14 English) miles.

The "Beacon" heretofore standing on Understen has been removed, leaving nothing on the summit of the rock but the White Tower mentioned, and two houses, both of which latter are painted red.

LIGHT ON THE NORSEKAREN, GULF OF BOTHNIA.

Hydrographic Office, November 28, 1848.

Information has been received by her Majesty's Government, that on the 13th of July, 1848, a Revolving Light was established on the largest and Southernmost Islet of the Norskuren Group, in the Gulf of Bothnia.

This Light revolves in one minute, and at each revolution shows a flash which lasts from five to ten seconds. These flashes are preceded and followed by short intervals of darkness, which, however, will not appear to be total at the distance of a few miles.

The Light-house stands in latitude of $63^{\circ} 13' 45''$ N., and longitude $19^{\circ} 37' 39''$ E. of Greenwich; the height of the Tower is 62 feet, but the Light stands 104 feet above the level of the sea, and may be seen at the distance of about 16 miles from all points of the compass, in clear weather.

SHIVERING SAND BUOY.

The Shivering Sand Buoy, which was moved about two cables' lengths to the W. $\frac{1}{4}$ N., lies in $3\frac{1}{2}$ fathoms at low water spring tides, with the following marks and compass bearings:—

West end of Cleve Wood, in line with St. Nicholas' Eastern Preventive Station-house. S. by E. $\frac{1}{4}$ E.; Whitstable White Mill, in line with the Western Coke Chimney, at the same place, S. W. $\frac{1}{4}$ S.; East Ooze Buoy, N. W.; Mouse Light Vessel, N. W. $\frac{1}{4}$ N.; Nob Buoy, N. E. by E. $\frac{1}{4}$ E.; Girdler Light Vessel, S. S. E.; East Gilman Buoy, S. W. $\frac{1}{4}$ S.; Red Sand Buoy, West Northerly.

NEW LIGHT-HOUSE AT DARSZER ORT.

Darszer Ort, in the peninsula of Darsz, a Light-house with two Lights has been which will burn throughout the whole year, to begin from 1st January, 1849. Lights will be lighted every day at sunset and extinguished at sunrise.

First Light is one hundred and five Prussian feet above the level of the sea, and in Fresnel's apparatus of lenses of the second order of rotatory light with dark-minute. The upper and lower part of the star remain in sight during the darkness that navigators may not lose their direction while it prevails. It is, therefore the centre of the star which is subjected to the darkness. The Light illuminates the entire horizon, and serves the navigators, who lose sight of the Light of Arcona, on approaching the shore, clearly to mark the promontory point of Darszer Ort. Second is a fixed Light, forty Prussian feet above the level of the sea, and is formed

Argand Lamps, with reverberatory reflectors. This Light, in connection with First Light on the Danish Coast of Falster, marks the passage between the sand bar Darszer Ort and the rocky reef Trendelen, and lightens an angle of forty degrees West $\frac{1}{2}$ North to North-west by compass.

Darszer Ort, where the Light-house is erected, is situated $54^{\circ} 29'$ Northern latitude, $31'$ Eastern longitude from Greenwich.

Light-house is situated at a distance of 57 rods, or 114 fathoms, from the sea, the being 100 feet high, built of red brick and not plastered, on which the Lantern is and serves also for a landmark.

HETTY POINT, OR CAPE CAPSTAN LIGHT.

New Light-house on Hetty Point, or Cape Capstan, in lat. $45^{\circ} 35'$ N., lon. 64° being the north side of the entrance of Apple River, on the south shore of Cumberland Bay, about six leagues above Cape Chignecto, is also in operation, and shows two horizontally, when approaching it from the westward or seaward side. The lights are forty feet above high water, (rise and fall about 55 feet.) The building is square and white, and is a conspicuous beacon in day time to mark the entrance of Apple River, a place of resort for vessels of 100 tons and under. The following bearings are shown in the light:—

Waters' outermost head.....	S. 61° W.
River.....	N. 9° W.
Range Light.....	N. 41° E.
the Island.....	N. 51° E.
shore, easterly.....	N. 62° E.

LIGHT-BOAT IN THE PASS OF WIELINGEN.

Information has been received through the Belgian Consul General at New York, that a boat will hereafter be moored in the Pass of Wielingen, near the shoal known as de-market, in the river Scheldt, from which the following are the bearings:—Tower of Flushing E. $6^{\circ} 26'$ S.; the Tower of Ecluse, S.; the Light-house of Spelle, N. E. $5^{\circ} 37'$ E.; and the Tower of Lisseweghe, S. W. $\frac{1}{4}$ W. The light placed thirty-four feet above the water, and will contain eight argand lamps, showing a constant red light, which will appear every night from sunset to sunrise. At the same time, the light-house of Heyst, in latitude $51^{\circ} 20' 22''$, and longitude $3^{\circ} 14' 13''$ from Greenwich, will show a white light.

LIGHT ON HEATH POINT.

Hydrographic Office, November 22, 1848.

Information has been received at the British Admiralty, that on the 14th of October, a Fixed Light was established on the eastern end of the Island of Anticosti, in the Gulf of Lawrence.

The Light stands 100 feet above the level of the sea, and may, therefore, be seen at a distance of about 16 miles, in fine weather. It was extinguished on the 15th December, 1848, and will be again lighted on the 1st of April, 1849.

When standing in towards South Point, the Light-house should not be shut in behind the Point, as some dangerous reefs project from the former.

JOURNAL OF MINING AND MANUFACTURES.

GOLD AND OTHER PRECIOUS METALS.

THE Boston "*Bank Note List*" of Willis & Co. furnishes, in a late number, some speculations and statements touching the value of the precious metals, which will doubtless be read with interest, when, as at the present time, the gold mania seems to have, in a greater or lesser degree, taken possession of most of our countrymen. The statements are undoubtedly derived from the most authentic data; the speculations we quote as the views of the editor of the *Bank Note List*, without, however, endorsing his opinions:—

PRECIOUS METALS. The amount of gold and silver in the world is generally estimated at ten thousand million of dollars, whilst the annual consumption, or rather demand, is supposed to be one-half of one per cent of this sum—that is, fifty millions of dollars. There appears to be no accurate data as to the annual production of these metals; the whole is a subject of speculation. From the best sources of information that are open to us, the yearly production of silver may be set down at twenty-five millions, and of gold from fifteen to twenty millions. Starting from this point, which may be considered as approaching accuracy, the expected yield of the California mines will only about keep the stock in the world going. No perceptible change in the value of gold has ever been produced by the large quantities which have been hitherto acquired, amounting to one hundred and twenty-five millions from Russia alone, within a quarter of a century. Whatever may be the amount raised from California, the result will be to enlarge the consumption for purposes of art and luxury, whilst its value for commercial uses will remain unchanged.

There is unquestionably a scarcity of gold among the nations of the world for currency. The coins of one government are constantly being recoined at the mints of another. A large amount in new sovereigns, which came out to this country a few years since to adjust the balance in our favor, were recoined at Philadelphia, so that soon after, when the state of trade changed the account in favor of England, and it became necessary to export specie, sovereigns commanded a premium of nearly one per cent, although the number so recently imported greatly exceeded that required for the export, to say nothing of those on hand formerly. United States, as well as foreign coins, are being constantly melted down by our manufacturers, for the want of bullion. The following article we have prepared with considerable care; the statements may be strictly relied on, and we trust it may be found both useful and entertaining in the present absorption of the public attention in regard to the subject of which it treats.

GOLD. Gold is the only metal of a yellow color, and affords a resplendent polish; it is the most malleable of metals, but of great tenacity; its hardness is almost equal to lead and tin, but inferior to iron, copper, platinum and silver. It may be exposed to the atmosphere for any length of time, without suffering change; it is remarkable for its beauty; it is nearly twenty times heavier than water, and next to platinum the heaviest known substance; gold is worth sixteen times as much as silver, and nearly three times as much as platinum. It is easily wrought and stamped, or melted, and does not waste by the operation; and when alloyed, its proportions can readily be ascertained.

The degree of alloy in gold and silver, in currency, is various. A prevalent proportion is one-twelfth; but the decimal proportion of one part alloy in ten, is gaining favor, and is the present standard of all Spanish coins, and coins of various parts of Germany, of France, Belgium, Rome, and the United States. Copper and silver are the alloys of gold in the United States—the proportion is 900 parts gold, 25 silver, 75 copper, a fraction over 21 carats fine. The weight of an eagle is 258 grains, (parts in proportion,) of which 232 grains must be fine gold.

The heaviest coin of modern times is the golden five moidore piece of Portugal, which weighs 628 grains, and is worth \$32 70; the smallest is the Turkish para, weighing 1½ grains, partly silver, and worth one-third of one cent. Russia is the only nation where platinum is used in currency. They use three denominations, 12, 6, and 3 roubles. The objection to platinum for coin, is its scarcity, unsteady price, and the inability to melt it by furnace heat; it can only be wrought by welding. Its value is rated at \$6 70 the troy ounce; the annual product, \$400,000.

Bullion, in commerce, is applied to gold or silver reduced from the ore, but not manufactured. Gold bullion, at the mint of the United States, is considered as of two kinds—

NET AND MANUFACTURED. Of the first kind there are four descriptions. 1. *rains*, or gold dust. 2. Amalgamated cakes and balls. 3. Laminations. 4. *rs* and cakes.

The washed grains are the shapeless particles, or masses, which are collected washings of rich alluvial sands. They are of all sizes, from the massive lump to *st spangle*. In North Carolina a lump was found which weighed, in the crude pounds. It was found near the surface; its value was \$4,850. In Peru, the *up* found weighed 26½ pounds; and a lump found in New Granada, 27½ pounds; the possession of the French Academy weighs 37½ pounds troy, and is 992 *as* fine, worth \$9,200. This is the description of gold found in North and *olina*, and Georgia. The latter is the best gold; the average fineness is 950 *hs*; it occasionally reaches 995 thousandths, which is the nearest approach to *urity* ever discovered. Mexican and African gold comes in this shape, and from 900 to 950 thousandths fine.

Amalgamated gold is found with quicksilver. Gold in this form is very *nd* suffers a loss of nearly 5 per cent in melting. This description is brought *inia*, Western Mexico, and New Granada.

Laminated gold is largely alloyed with silver, apparently in layers, plated *it* is found in Central America. The metals are sometimes separated before *ent* to the market, by adding silver till the gold forms about one-fourth of the *in* the whole is rolled or beaten into thin sheets, and exposed to the action of sulphuric acid, which removes the silver without destroying the cohesion of

. Bars and Cakes.—In our mining regions the usual form is a neat ingot, six *ig*, by one-half to one inch in breadth and thickness. From Western Mexico, *Chili*, gold comes in cakes, called *tiges*, frequently bearing an assayer's stamp, *on* 25 to 50 per cent in fineness. A fraud is practised in this kind of gold, by *called* *rickling*, which consists in plunging a bar into an acid, which dissolves *ila*, and removes them from the surface, leaving the gold alone visible. *st* important class of gold bars from London and Paris, (chiefly the latter,) bear *of* the government or private assayer. They are styled pure gold. The French *, in* 1835, was paid to this country in upwards of 600 bars, the aggregate value *was* \$3,500,000. A bar of fine gold, six inches long, three inches wide, and *half* thick, which is the medium size, would weigh 275 ounces. Its value would *be* \$5,900.

SUCCESS OF AMERICAN MANUFACTURES IN INDIA.

Liverpool paper, says the *Washington Union*, in an article upon British and commerce, has the following remarks. The writer attempts to show that the *nce* in the English navigation laws has been detrimental to the British interests *arter*, but that it has been highly favorable to American shipping and American *rea*. We copy his statement to show the course of business in relation to Amer- *British* manufactures in India, where it would seem, from this authority, that our *re* nearly a fair chance as compared with their British rivals, and thus supersede *se* market.

if the earliest measures of Lord Dalhousie, the present Governor General of *a*, in wild anticipation of the repeal of the navigation laws *here*, to sweep away *interparts* of those laws *there*. This has, of course, conduced to the benefit of *shipping*. It seemed to 'the powers that be,' not enough that a special act of *it*, for reasons *we* could never discover, empowered the shipping of the United *impersed* our own shipping in our own English ports, and to carry cargoes of *manufactures* to British India on the self-same terms as British shipping. *authorities* in India have hastened the adoption of a navigation policy which *pays* the game of the American shipping. English vessels cannot carry one six- *th* of freight *coastwise* from port to port in America; yet American vessels can *' freight* *coastwise* from port to port in an Indian empire! This, with facilities *ig* cotton to China, and the favorable terms on which they can import American *used* cottons in India, are already yielding their natural and bitter fruits. *fortunate* conjunction with this relaxation of the navigation laws—a relaxation *eady* crowds our India ports with a remarkable increase of American vessels— *the* ill-considered assimilation, as nearly as possible, between British and Amer- *an* goods. The import duty into India, on British, was raised from 3 to 5 per *was* simultaneously lowered on American fabrics from 20 to 10 per cent.

"It needs no seer to predict the fatal consequences. Only the other day, the Peel agent talks glibly of American manufacturers girding up their strength to enter on the new competition with our own manufacturers, in *our own* markets of the East. With all reverence, we assert that the political prophet is 'too late' in the field. His predictions previously become history. On high mercantile authority, intimately connected with the East, we learn that in certain descriptions of cotton goods the Americans have already beaten our manufacturers hollow. We allude especially to the heavier kind, called 'meetics' and 'drills.' It is well known that in tropical climates, cottons are the staple clothing. We hasten to inform the free-trading cotton spinners of this country, that they are *superseded* in these staple articles, and that it is 'a great fact that American cotton manufacturers are already clothing our own Indian army.'"

METHOD OF WASHING GOLD DUST IN CALIFORNIA.

RICHARD M. SHERMAN, a member of the Society of Friends, formerly a resident of the River, but now in the gold region of California, under date, San Francisco, 10th mo (8th October,) gives the following account of the method of washing the gold from dust and dirt:—

There have been many machines invented for the purpose of washing the gold from the dirt and sand; but the most general, and they say the best way is, to wash it with a common tin pan. The mode of washing it out is this: take a quantity of the selected from spots appearing to contain much of the "dust;" and put it into the pan; the pan is then filled (or nearly so) with water, when by the motion of the pan, or with the hand in the water, the dirt becomes saturated; the gold dust then, being so very heavy, settles to the bottom, and the water with the dirt is poured off, leaving the dust with the sand at the bottom. The gold dust is washed with so much facility, that, as yet, little quicksilver has been used, though several quicksilver mines have been discovered within sixty miles of this place, one of which has been worked, yielding 80 to 90 lbs per day. To give you some idea of the quantity of "dust" produced, people are arriving from the gold region with from 10 to 100 pounds of the gold dust, worth \$192 per pound, or say from \$1,920 to \$19,200; and some trading concerns have broken down \$25,000 worth at once. I yesterday weighed out and paid away \$18,000 in transacting the business of myself and partner.

MERCANTILE MISCELLANIES.

A MODEL WAREHOUSE FOR FANCY GOODS.

We have been struck with the beautiful architecture of the Fancy Goods and C Warehouse lately erected by Messrs. William H. Cary & Co., at number 243 and Pearl-street, and 18 and 20 Cliff-street, in New York. For elegance and fine effect, the edifice presents one of the most striking store fronts in the city. Edifice, we say, for certainly its dimensions, and the style and scale of all its arrangements entitle the building to no less dignified a name. Running through from Pearl to Cliff-street, with a depth of two hundred feet, being the entire depth of the block, it has a front of fifty feet on Pearl-street, and covers more than four full lots of ground, having good right, therefore, four street numbers. The merchandise sales-room embraces an area of over ten thousand square feet, and the effect upon the visitor on entering, of the long vista of iron rods and of shelves loaded and crowded with valuable goods, is really imposing. The front story, on both Pearl and Cliff-streets, is adorned with cluster columns of the brown sandstone. These columns support a structure five stories high, carefully built of the same beautiful stone, and terminating in a heavy worked stone cornice, which gives effect to the whole.

In short, the new warehouse of Messrs. Cary & Co. adds another proof to the fact, which the streets of Boston, New York, and our other large cities afford that a good taste in building is not confined to church architecture. An increased attention to what is called ecclesiastical architecture has often been remarked of late; no proof, perhaps, is needed. But whether the increased beauty of our churches indicates increased piety or not, there cannot, certainly, be better evidence of simple means

to good taste, a better indication of a well established business, than a warehouse like that of Messrs. Cary & Co., in which, while every convenience in the business arrangements is provided, beauty of appearance is not neglected.

These arrangements are very complete. Connected with the sales-room is a well lighted basement, of the same ample dimensions. Here may be found the modern conveniences (which become rather indispensable in such a building) of gas and Croton fixtures, and hot air furnaces of the most approved style. Under the street in Cliff-street is a vault detached from the building, affording the amplest security against fire.

One would think that a warehouse so large would afford "ample room and verge enough" for a business of any extent in articles of no greater bulk than combs, brushes, buttons, thread, needles, beads, pins, pens and perfumery. But did the reader ever consider how many varieties there are of the single article, a brush, varieties not merely useful but necessary? In the catalogue of Messrs. W. H. Cary & Co., we find fifteen or sixteen different kinds, without reference to the different materials of brushes of the same kind. Of what a vast variety of materials are combs manufactured! In the catalogue are mentioned tortoise shell, ivory, horn, German silver, brass, iron and wood, and styles varying from the plainest to the most exquisitely finished. There are beads of every style and material, of coral and of glass, suited alike for the most fastidious child of luxury and for the rude taste of the savage, such as the African trader finds a ready market for. Here is a vast storehouse, a museum, in which are to be found in every variety of material, size, ornament and finish, all these many articles which we term fancy goods, but many of which are as necessary to comfort, decency, and even health itself, as the bulkier staples. When we consider how numerous these articles are, we feel no surprise that it takes one of the largest warehouses in the country to hold them all.

Time and space will not allow us to enumerate one-half of the articles to be found there. We should have to copy at length one of their catalogues, which are printed in English, French, and Spanish, to give a complete idea of the extent of Cary & Co.'s establishment. We will only add that almost every travelling merchant in the country might drive up his wagon, or bring his pack to this warehouse, and fill them there with everything to suit the varying tastes and necessities to be met with on the longest trading peregrination, without going farther, or a second call.

Messrs. Cary & Co. are not only dealers in, but also manufacturers of, many of their articles, such as combs, of every kind. They also supply other manufacturers with tortoise shell, ivory from India and Africa, pearl shell, and materials of the kind.

Nor are their operations confined to the home market, including the south and west, and (since the treaty with Mexico) not excluding California. They send their valuable merchandise to the West Indies, to South America, and to Africa.

Next to the satisfaction of conducting one of the largest, if not the very largest business of the kind in the country, must be that of having so beautiful an edifice to conduct it in, a building uniting every convenience in its business arrangements, with all the elegance and ornament compatible with the rules of store architecture, and giving evidence at once of the good taste and wealth of the proprietors. But a personal inspection of the building and premises will afford a much better idea of the utility and beauty of the structure, and of the extent of this branch of trade, than any statements, with pen or pencil, that we can give in the pages of the *Merchants' Magazine*.

THE PHILADELPHIA MERCANTILE LIBRARY COMPANY.

The twenty-sixth anniversary of this flourishing, well-managed institution took place on Tuesday, the 9th of January, 1849—THOMAS ROBBINS, Esq., presiding, and WILLIAM BOWEN acting as secretary. The report of the Directors, an able, business-like document, which we shall endeavor to publish in the next number of the *Merchants' Magazine*, was read and accepted, and the following gentlemen were elected directors for the ensuing year:—Thomas P. Cope, Isaac Barton, Charles S. Wood, Joseph Patterson, Robert F. Walsh, John J. Thompson, J. L. Eringer, William L. Schneffler, William E. Bowen, Joseph C. Grubb, Marmaduke Moore, William Ashbridge, W. C. Patterson. Treasurer, John Faussett.

The President of the Company, THOMAS P. COPE, Esq., one of the most eminent and worthy merchants of Philadelphia, has, we believe, occupied the chair of this institution for many years, if not from its start; and we rejoice to notice, by the following resolution, adopted at the annual meeting, and the correspondence between that gentleman

and the committee, which we also subjoin, that the services of the venerable *Pro* are fully appreciated. The compliment paid to him in procuring two portraits, to be served among the members of the Company, is alike creditable to him and his associates.

The following resolution, presented by Samuel C. Morton, Esq., was unanimously adopted, to wit:—

Resolved, "That the thanks of the members be, and they are hereby tendered to the Board of Directors, for their having caused to be placed in the Library Room a remarkably executed portrait, by John Nagle, of our highly valued President, *Thomas Cope*, Esq., and that they be requested to furnish for publication with the process of this meeting, any correspondence which may have taken place in connection therewith."

The following is the correspondence referred to in the resolution:—

Philadelphia, August 18th, 18

THOMAS P. COPE, Esq.

DEAR SIR:—The undersigned have been appointed a committee, in behalf of you Directors of the Mercantile Library Company, to request you to sit for a portrait, as the Directors purpose assigning a permanent place in the Library Room.

We trust, esteemed sir, that you will respond favorably to the wish of your fellow directors, who, through the undersigned, have made the necessary arrangements with a distinguished artist, Mr. John Nagle, who is prepared to carry out their wishes in a time that may best suit your convenience.

It has long been a desire of the Directors to procure for the institution the likeness of one who is so intimately connected with its history.

This desire is largely shared by the members, who, in common with the directors, are solicitous that those who come after them may possess the pictured resemblance of whose career as a Philadelphia merchant illustrated for more than half a century a eminent qualities that should ever accompany that time-honored appellation.

The cheering example which your career affords the young, showing, as it does intelligence, industry, and probity beget, as their legitimate fruits, the prosperity of the possessor, and the esteem of mankind, will not be lost upon future times, when your will have become an honored tradition, indicative of all the virtues. Then the stern and care-worn merchant, surrounded by business perils, and beset by insidious suggestions, may nobly surmount his difficulties, and stand erect in stainless integrity at the collection of departed excellence.

It is, however, unnecessary for us to dwell upon those traits which for more than years have identified your name, not only with the mercantile enterprise, but with the scheme of general usefulness, and with every benevolent institution of our fair city. As one of its founders, and during the greater part of its existence, its respected president, your kind countenance and judicious counsel have greatly aided to place the company in its present flourishing condition. Your fellow members of the board have with constant admiration, that neither advanced age nor inclement weather, nor engagements, have ever detained you from its meetings; thus evincing your deep interest in the association, and affording an example which has not been without its influence.

Your answer at an early day is respectfully requested by
 Your friends,
 ROBERT F. WALSH,
 WILLIAM L. SCHAFER, } Committee

The subjoined is Mr. Cope's reply:—

Calvin Hook, Eighth Mo. 23d, 18

MY DEAR FRIENDS:—Your letter of the 18th instant came into my possession yesterday at this my quiet retreat, and I can truly say that I am deeply affected by the kindness of its contents.

Unambitious and undeserving of the distinction you propose to assign me, permit me to add that, if the possession of my portrait can confer pleasure on gentlemen with whom I have been so long and so agreeably associated, I should, in my own estimation, incur the odium of ingratitude, were I, from any fastidious notion of my own, to refuse compliance with your request.

I expect soon to return with my family to the city, when I will cheerfully submit myself to your disposal.

Your sincere friend,
 To ROBERT F. WALSH, WILLIAM L. SCHAFER, Committee.

THOMAS P. C.

THE BOOK TRADE.

1.—*The History of England from the Accession of James II.* By T. BABINGTON MACAULEY. New York: Harper & Brothers.

The Brothers Harper have brought out, simultaneously with its appearance in England, Macauley's history of that kingdom from James II. to the beginning of the present century. The London *Athenæum* thus speaks of this great work:—

"Great expectations were raised by the announcement of this work, and assuredly they will not be disappointed. If the author exhibits here less of that sparkling brilliancy which lends such a charm to his historical and biographical essays, he compensates for its absence by displaying greater power in the analysis of evidence, and in detecting the import of facts which had stood isolated, and had, therefore, to a great extent been neglected. In his former works, Mr. Macauley shows skill and acuteness in the delineation of character. He seizes not merely on those salient points which serve to trace the outline of mental feature, but on the more minute and delicate traits which give to the portrait individuality and expression. He renders us as familiar with the men of the Revolution as if they had been personal acquaintances. We estimate this quality highly, because the rise and the consequences of the Revolution of 1688 were guided and molded more by the character of the persons engaged in it, and less by the mere force of circumstances, than any event of equal magnitude recorded in history.

2.—*History of Alexander the Great.* By JACOB ABBOTT. With Engravings. 18mo., pp. 278. New York: Harper & Brothers.

This volume, the third of Mr. Abbott's historical series, is devoted to the life of Alexander the Great, who, in the brief period of twelve years, ran through a series of exploits which were so bold, so romantic, and which led him into such adventures in scenes of greatest magnificence and splendor, that all the world looked on with astonishment, and mankind have continued to read the story since, from age to age, with the greatest interest and attention." This admirable series of histories is designed for young persons between the ages of fifteen and twenty-five, who wish to become acquainted with leading events in the history of the old world and of ancient times, but who, coming on the stage in this land and at this period, have ideas and conceptions so widely different from those of other nations and of other times, that a mere republication of existing sources is not what they require. The story of Alexander, as here told, is peculiarly adapted to answer the purpose intended by the author.

3.—*Benjamin Franklin: his Autobiography; with a Narrative of his Public Life and Services.* By REV. H. HASTINGS WELD. With numerous Designs by J. G. CHAPMAN. 8vo., pp. 512. New York: Harper & Brothers.

The first number of this illustrated Life of Franklin, comprising his Autobiography and Narrative of his Public Life and Services, by H. Hastings Weld, has just been published. The Autobiography of Franklin is replete with lessons of wisdom and instruction for young men setting out in life; the publishers could not, therefore, render a more acceptable service to the rising generation than that of re-producing the work in its present beautiful and attractive form; for, to use the language of Lord Brougham, "his memoir is the most natural, ingenious, and interesting autobiography in our language." The illustrations are the best of the kind we have ever seen, and the engraver has done full justice to the designs of Chapman. The work will be completed in eight parts, and altogether form a beautiful octavo volume of more than five hundred pages.

4.—*The American Ladies' and Gentlemen's Manual of Elegance, Fashion, and True Politeness.* By CHARLES WILLSON DAY. 18mo., pp. 154. Buffalo: George H. Derby & Co.

This work, the production of an American, was originally published in London, where it passed through twenty-two editions, and has, we are credibly informed, been made the standard of modern society in England. It has been attributed to Count d'Orsay. To make this erroneous statement, the real author has been induced to put his name to this American edition. We agree with the author in his brief prefatory address to the American public, that "it can hurt no one, but benefit many, for them to compare the ways of polished nations with their own; and to consider whether a common sense application of the ordinary observances of good society, as practised in older countries, cannot materially elevate, in the social scale, the aspiring and the successful." We commend it to all who are desirous of rendering themselves acceptable to fashionable society.

5.—*The American Statesman*. Edited by ARNOLD INGRAHAM and WILLIAM J. TENNY.

The plan of this paper, which was commenced on the first week of the present year, differs essentially, in many of its features, from any other journal published in this or in any other country. Although neutral in party politics, its editors discuss with fearless ability every great question of political and social reform that engages the attention of the statesman, or agitates the minds of the masses. The editors, whatever may be their views, have no fear of truth, but lay before their readers the strongest arguments brought forward on all sides of all important questions: so that a "subscriber to the *American Statesman*" will have before him in a single sheet all the important political matter that he would otherwise have to subscribe for the principal leading and influential journals of both parties. It includes in its plan the record of "important documents relating to National Legislation also, the annual Messages of the Governors of the several States, and other documents relating to State Legislation." Another valuable feature of this journal is, the full information it gives of the condition of the arts and sciences, especially such as relate to practical affairs of daily life. Indeed, no journal heretofore published in this country covers so broad a field of investigation, or is so comprehensive in its scope. The editors and proprietors, Messrs. INGRAHAM and TENNY, are gentlemen of large experience, liberal views, and great industry: and if merit, moral and intellectual, are the requisites of success, and we believe they are, when properly understood and appreciated, the circulation of their journal will not be surpassed by that of any other in the United States.

6.—*Modern Accomplishments, or the March of Intellect*. By MRS. CATHARINE F. CHAIR, author of "Modern Society," "Charles Scymour," etc. 12mo., pp. 276. New York: Robert Carter & Brothers.

It was scarcely necessary for Mrs. Sinclair to apologize for the employment of an imaginary history to illustrate and enforce religious duty, by reference to the Great Teacher who sanctioned it, by his use of parables. A pure truth may embody as great a truth as the most undisputed solution of a mathematical problem. The design of this domestic story, which we state in her own language, is to separate the essentials of religious conduct from its excrescences,—to distinguish feeling from imagination,—to contrast hypochondriacal fanaticism of a disordered fancy with the purifying influence of what she considers an enlightened faith,—to show how frequently well-intentioned persons "know not what manner of spirit they are of,"—how the Christian temper may be substantially contravened, while its dictates are professedly obeyed;—and finally, how language of scripture may be perversely misquoted to support a line of conduct, which benign and gentle principles uniformly condemn. Its teachings, if heeded, will doubtless benefit the morals of many readers.

7.—*American Text-Book for Letters*. By NATHANIEL DEARBORN. Boston: Nathaniel Dearborn.

The design of this beautiful work is to furnish the most correct method of producing the various letters now in use with the pen, brush, chisel, or graver; and may, therefore, be considered an indispensable handbook for the penman, the painter, the sculptor, the artist. Mr. Dearborn is one of the oldest and best engravers in the city of Boston, and the present work, which has cost him much time and money, reflects great credit on his industry and skill. It has already passed through several large editions, and meets the highest commendations of the press, and of distinguished individuals of taste and discrimination. It is at once a copy-book for schools, and a manual, more perfect in its design than anything we have ever seen for all persons engaged in any of the arts which require the formation of letters. It also embraces Pitman's system of Phonography, and contains rules for a correct understanding of all the principles evolved in the work.

8.—*Grayslaer; a Romance of the Mohawk*. By CHARLES FENNO HOFFMAN, author of "A Winter in the West," "Wild Scenes of the Forest and Prairie," etc., etc. Fifth Edition. 12mo., pp. 539. New York: Baker & Scribner.

In this work, which has already passed through four editions, Mr. Hoffman has succeeded in blending the historical novel with the domestic love tale, stamping "the unity dramatic poem by a continuous moral purpose, developed through the action of sentiment wrought up to a climax of passion." The wild border annals of the State of New York it seems, afforded the historical materials, and the criminal trials of Kentucky furnished the elements of a strange tale of ill-regulated affections. We have long desired to possess this, and the other volumes of Mr. Hoffman's writings, in a form worthy of publication in our library; and we thank the enterprising publishers for the handsome style of its publication.

9.—*University Sermons. Sermons delivered in the Chapel of Brown University.* By FRANCIS WAYLAND, President of the University. 12mo., pp. 328. Boston: Gould, Kendall & Lincoln.

This volume contains twenty-one sermons, written at various intervals during a period of four years, and with the exception of two, originally prepared for, and delivered in the college chapel, before the officers and students of Brown University. The exception treats of subjects at present of universal interest, and consists of two sermons on the revolutions in Europe, written immediately after the accounts were received of the events to which they relate. The design of the learned author in the preparation of most of the discourses was "to present a plain exhibition of the way of salvation by Christ." They bear the impress of the able logician, the accomplished scholar, and the sincere Christian, and contain views on some points of Christian doctrine and ethics, that Christians of most of the sects into which Christendom is divided will gladly accept, although differing with the learned divine in regard to some of the prominent dogmas inculcated in the collection. The Christian and philanthropic views of the preacher touching the revolutions of Europe will command the respect of many who do not sympathize with his theological sentiments.

10.—*The Journal of the Pilgrims at Plymouth, in New England, in 1620. Reprinted from the Original Volume. With Historical and Local Illustrations of Providences, Principles, and Persons.* By GEORGE B. CHELVER, D. D. 12mo., pp. 369. New York: John Wiley.

This is an interesting and valuable contribution to the New England historical literature. The *Journal of the Pilgrims*, which occupies the first one hundred pages of the volume, is a *fac simile* reprint from the London edition of 1622. In the "historical and local illustrations of Principles, Providences, and Persons," occupying full two-thirds of the volume, Mr. Cheever attempts "to trace the wonderful providential discipline of God with the colony of Plymouth, and to some extent with that of Massachusetts, showing the constant action of those principles of piety for which they suffered, under the supremacy of which they labored, and by which they were successful."

11.—*The Young Patroun; or Christman in 1690. A Tale of New York.* By the Author of "First of the Knickerbockers." Pp. 142. New York: George P. Putnam.

This story, we are told, was written prior to its recent predecessor, "The First of the Knickerbockers," noticed in a former number of this Magazine. The scene of the story is laid in the city of New York; the time, more than a hundred and fifty years ago. The author is evidently a liberal descendant of the Knickerbockers, and describes his "worthy fathers, the founders of the great metropolis, the explorers of these majestic rivers, the hospitable, humane, generous, stubborn, obstinate 'old smokers of Manhattan,'" with a vividness that would aim to convince the sceptical that the author was a reconstituted Knickerbocker. We trust he has more of the same sort for "home consumption."

12.—*The Universal Guide to Health, by a Rational Course of Food and Diet.* By ANDREW COMBE, M. D., author of "Combe's Physiology," etc. 12mo., pp. 310. Buffalo: George H. Derby & Co.

The works of Dr. Combe enjoy, deservedly, a world-wide reputation. No writer has done more to advance the moral and physical interests of mankind in our time. The present work, which, since its appearance in 1836, has passed through seven American editions, is essentially a continuation of the work first published by Dr. Combe in 1834, under the title of "Principles of Physiology applied to the Preservation of Health and to the Improvement of Physical and Mental Education;" and the object the same, namely, "to lay before the public a plain and intelligible description of the structure and uses of some of the more important organs of the human body, and to show how information of this kind may be usefully applied in practical life." It is a handsome, readable edition of a very excellent and useful work.

13.—*The Prisoner's Friend: a Monthly Magazine devoted to Criminal Reform, Philosophy, Literature, Science, and Art.* CHARLES SPEAR, Editor and Proprietor. Boston: Published by the Editor.

This work is now published monthly in the octavo form. Its design is indicated in the title quoted. Its editor is deeply imbued with the reformatory and philanthropic spirit of the nineteenth century, and he brings to bear, upon all matters pertaining to criminal reform, a deep and abiding faith in that Gospel, which teaches us that the only efficient method to overcome evil is by doing good. Philosophy, literature, science, and art, in the head, hands, and heart of the editor, are all consecrated to the cause of Humanity. God speed and prosper his noble mission!

- 14.—*Proverbs for the People; or, Illustration of Practical Goodness, drawn from the Book of Wisdom.* By E. L. MAGDOX, author of "The Orators of the American Revolution. 12mo., pp. 272. Boston: Gould, Kendall & Lincoln.

The design of this work is "to discuss the exalted principles of Christian morality in a manner adapted to the comprehension of the great mass of mankind." The work is divided into seventeen chapters, each of which is devoted to a distinct virtue or vice. For instance, one chapter is entitled "Captiousness; or the Censorious Man;" another, "Kindness, or the Hero who best Conquers;" another, "Frugality, or the Beauty of Old Age;" and so on, including in the catalogue the virtues of Integrity, Industry, Perseverance, Sincerity, and the vices of pride, extravagance, vanity, idleness, falsehood, deceit, flattery, etc. The author has grouped the teaching of the Christian and Jewish Scriptures, as well as those of ethical writers, ancient sages, and modern poets, and woven them into the symmetrical essay with the web of his own thoughts, suggested by the subject or the experience of a life of observation and reflection.

- 15.—*Theory and Practice of Teaching; or Motives and Methods of good School Keeping.* By DAVID P. PAGE, A. M., Principal of the State Normal School, Albany, New York. 8vo., pp. 319. New York: A. S. Barnes & Co.

This is the tenth edition of this work, a fact which affords pretty conclusive evidence of the estimation in which it is held by the public. For further evidence of its utility, it is only necessary to refer to the work itself—to "read, learn, mark, and inwardly digest" its pages, which contain not only the theory, but the practice of teaching, derived by Mr. Page from the realities of the school-room during some twenty years of actual service as a teacher. The spirit, responsibility, habits, and literary qualifications of the teacher are described; the modes of teaching, conducting recitations, and exciting an interest in study, are pointed out; school government and school arrangements, and the relations of the teacher to his scholars, to parents, and the members of his profession, are not omitted, but are treated in a clear and logical manner. It seems to cover the whole subject; and appears to us an indispensable *read meum* for all who assume the responsible duties of a teacher, either in the family, the common school, or the higher academy.

- 16.—*Outlines of a New System of Physiognomy. Illustrated by numerous Engravings, indicating the Signs of the different Mental Faculties.* By J. W. REDFIELD, M. D. 8vo., pp. 96. New York: J. S. Redfield.

We are not prepared to accept, much less to reject, Dr. Redfield's system of physiognomy, as partially laid down in this manual, which gives "but a brief outline of the subject so far as relates to the face." But we must confess that the theory is not only plausible, but, as explained and illustrated by Dr. Redfield, appears in the main quite natural. Perhaps that is admitting almost as much as the learned author would desire, as he does not "claim to have discovered the whole of Physiognomy," or that he "has not made some observations that will need correcting." His illustrations are ingenious, and many of them accord well with our rather superficial observation. The work, to say the least, is highly suggestive, and we commend it to all who believe that the "proper study of mankind is man."

- 17.—*Disturnell's Railroad, Steamboat, and Telegraph Book.* New York: J. Disturnell.

This little manual of Mr. Disturnell embraces full and correct information in reference to all railroads, and steamboat routes, and great lines of travel diverging from the cities of Washington, Baltimore, Philadelphia, New York, Boston, Portland, Albany, Troy, Buffalo, Montreal, etc., with other information useful to travellers, emigrants, etc. It includes, moreover, that new and wonderful improvement of the age, the Magnetic Telegraph, embracing all the principal lines in the United States and Canada, giving the regulations and charges, tables of distances, etc. Mr. Disturnell is indefatigable in his exertions to procure correct information, by applying, either by letter or personally, to the fountain head; and the work, a new edition of which is published every other month, brings the information down to within a day or two of its publication.

- 18.—*Merry-Mount; a Romance of the Massachusetts Colony.* 12mo., pp. 471. Boston: James Munroe & Co.

This romance is founded on the early history of New England, or, as the author styles it, the crepuscular period which immediately preceded the rise of the Massachusetts colony, a period with more of the elements of romance than any subsequent epoch. The interest of the story is well sustained throughout; and as illustrative of the early colonial history of the country, it will be read with interest, while it undoubtedly throws some light over the Pilgrim past.

9.—*History of the War between the United States and Mexico, from the Commencement of Hostilities to the Ratification of the Treaty of Peace.* By JOHN S. JENKINS, author of "The Generals of the Last War with Great Britain," etc. 12mo., pp. 506. Auburn: Derby, Miller, & Co.

During the progress of the war between the United States and Mexico, and near its close, the public were favored with numerous histories of the events, as well as with biographies of the men who figured in its brilliant scenes and stirring events; but most of these accounts were hastily prepared, and necessarily incomplete and imperfect. The author of this volume seems to have waited for the final closing of that war, a circumstance more favorable to the preparation of a complete and full history, and one which enabled him to avail himself of all the documents, as well as of the labors of other compilers and authors; and on the whole, we should say that he has succeeded in furnishing a more reliable and complete account of the war than any of his predecessors. The volume is handsomely printed, and copiously illustrated with portraits of distinguished officers and battle scenes.

10.—*Young Men Admonished; in a Series of Lectures.* By JOSEPH P. THOMPSON, Pastor of the Broadway Tabernacle Church. 18mo., pp. 278. New York: Leavitt, Trow, & Co.

This volume contains seven lectures, delivered by the author in the Broadway Tabernacle, and were listened to with deep interest by large audiences, composed, for the most part, of young men. The three first are devoted to a consideration of the temptations to dishonesty, to intemperance, and to gambling; the fourth, to "profaneness and Sabbath-breaking;" the fifth, "living for pleasure;" the sixth is entitled "life progressive;" the seventh, "the Bible the young man's guide." The evils and dangers of dishonesty, intemperance, and gambling, are forcibly and eloquently depicted, in strong but truthful language. The volume should be read by every young man in our commercial cities, and the merchant would do well to place it in the hands of every clerk in his employ. We have marked several passages for a place under our "Mercantile Miscellanies."

11.—*The Art Journal; Art-Union Monthly Journal of Arts.* London: Chapman & Hall. New York: John P. Ridner, Art-Union Building, 497 Broadway.

The present number (December) of the Art Journal completes the tenth volume, and although there would seem to be little room, we notice, by an advertisement on the cover, that the work is to be improved, and enlarged in size the ensuing year, commencing with January, 1849. As a consequence of this enlargement and improvement, the price is to be increased to eight dollars and a half per annum. We have often spoken in terms of the highest commendation of this work, and we see no reason to withhold or measure our praise. The engravings alone are richly worth the subscription price. We know of no similar work that will compare with it in artistical beauty or literary excellence.

12.—*The Vision of Sir Launfal.* By JAMES RUSSELL LOWELL. 12mo., pp. 27. Cambridge: George Nichols.

A small book this, but with far more true poetry than many a larger volume. The plot is founded on the mythology of the Romancers, the Holy Grail, the cup out of which Jesus partook of the last supper with his disciples. We hope soon to have a beautiful illustrated edition of Lowell, after the style of Cary and Hart's editions of Longfellow, Willis, Sigourney, or Muzzy's splendid edition of Whittier's poems.

13.—*Rhymes of Travel. Ballads and Poems.* By BAYARD TAYLOR, author of "Views A-foot," etc. 12mo., pp. 152. New York: George P. Putnam.

A collection of the poetical effusions of a young and promising writer. The Rhymes of Travel "give expression to thoughts and emotions inspired" by the author's journey in Europe. Simplicity and naturalness, combined with a smooth and graceful verse, are here rendered subservient to pure and gentle thoughts. A pleasant portrait fronts the title-page.

IRVING'S WORKS.—George P. Putnam published on the first of January, 1849, the second volume of "The Life and Voyages of Christopher Columbus," forming the fifth volume of the splendid edition of Irving's Works, now in course of publication. This volume contains one hundred pages more than was originally estimated as the average of the series, and therefore the price is necessarily increased to \$1 50. The next volume will comprise the whole of the "Companions of Columbus," and the Appendix. This is probably the last revised edition of Irving's complete works, and the most beautiful that has yet been published. It is illustrated with a chart of the West Indies, with the adjacent coast of South America, showing the tracks of Columbus.

- 24.—*Elements of Chemistry. With Illustrations of the Chemical Phenomena of Daily Life, and a series of Practical Experiments.* By D. B. REID, M. D., F. R. S. E. *Chambers' Educational Course, enlarged and improved.* By D. M. REESE, M. D., LL. D. New York: A. S. Barnes & Co.

The design of this volume, like all in this series of "educational works," is to acquaint the young with all the physical or natural sciences, by placing in their hands a separate volume devoted to each. The design of the present volume is to "facilitate the introduction of a course of Chemistry, as an elementary branch of education, in all schools and academies, and to lay a foundation for the young people's future progress in science." We have no hesitation in saying that the work is well calculated to answer the objects contemplated by the learned Scotchman who compiled, and the American editor, who has improved and adapted it to the use of schools in the United States.

- 25.—*Elements of Geology.* By DAVID PAGE. *Chambers' Educational Course, enlarged and improved.* By D. M. REESE, M. D., LL. D. New York: A. S. Barnes & Co.

The facts of the science of Geology, which must ever constitute the chief features of an elementary work, are here presented "in a form of simplicity and attractiveness which admirably adapts the subject to the young," thus "rendering it a most agreeable and useful study." The handsome and substantial style of publication adopted by the liberal and enterprising house of A. S. Barnes & Co. is worthy of all imitation.

- 26.—*Posthumous Works of the Rev. Thomas Chalmers, D. D., LL. D.* Edited by the Rev. WILLIAM HANNA, LL. D. Vol. V. Sabbath Scripture Readings. 12mo., pp. 507. New York: Harper & Brothers.

The present volume, the fifth of the series, consists of practical comments on various passages in the books of the Old Testament. The piety, learning, and ability of the author, it is scarcely necessary to say, impart to all his thoughts, opinions, views and feelings an interest and an importance, that must command the respect, if not the common consent of the entire Christian world.

- 27.—*The Art-Journal; Art-Union Monthly Journal of Arts.* New York: J. P. Richter.

The last number of this work contains three beautiful line engravings in the best style of the art, viz: *Pilgrims in Sight of Home*, engraved by C. W. Sharp, from the picture by C. L. Eastlake, R. A.; *Live at the Fountain*, engraved by W. Rolfe, from the scene by L. H. Baily, R. A.; and *Innocence*, by C. W. Wagstaffe, from the picture, by G. B. Greuze. The number is embellished with a great number of fine illustrations, the finest specimens of wood engraving we have ever seen.

- 28.—*The Oak Openings; or the Bee-Hunter.* By JAMES FENIMORE COOPER. 2 vols. 12mo. New York: Burgess, Stringer, & Co.

If the author of the "Pioneers," the "Last of the Mohicans," "Path-Finder," etc., etc., has lost any of his vigor, it is more than we can discover. Certainly this last effort, if we do not greatly err in our estimate, is equal to any of the author's earlier productions. Cooper, after all, is a novelist of which his countrymen may well be proud.

- 29.—*The Memoirs of a Physician.* By ALEXANDRE DUMAS, author of "Monte Cristo," "The Two Dianas," "George the Planter," "The Three Guardsmen," etc. etc. etc., pp. 347. New York: Stinger & Townsend.

One of Dumas' most exciting tales, from the English edition, said to be translated with remarkable fidelity. It is interspersed with a great number of engraved illustrations, copied from those of the French edition of the work.

- 30.—*The Legends of Montauk.* By J. A. AYRES. With an Historical Appendix. 8vo., pp. 128. New York: George P. Putnam.

An attempt of the author, who visited the peninsula of Montauk during the summers of 1846-7, to recall the pleasant hours spent on that romantic spot. The legends are told in easy and graceful verse, and are well calculated to create an interest in the history, the traditions, and the scenery of this peculiar country.

- 31.—*The Triad; or Atheism, Polytheism, and Infidelity.* By Rev. TIMOTHY A. TAYLOR. Boston: James French.

This little volume is designed by its author as a companion of "The Triune," noticed above, in which he presented evidence of the Divine existence, and proof that the Bible is the word of God. The concise and comprehensive form in which the subjects are presented, will recommend them to many who cannot find time to peruse more elaborate works.

THE MERCHANTS' MAGAZINE,

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HUNT'S

MERCHANTS' MAGAZINE

AND

COMMERCIAL REVIEW.

MARCH, 1849.

Art. I.—THE BRITISH EMPIRE IN THE EAST.

WHETHER or not the remark is as true as common, "*that there is no romance like real life*," most assuredly, the history of the progress of affairs in British India presents an ample and striking illustration of the saying—"truth is stranger than fiction." If any great speaker in the British Parliament had risen one hundred years ago or so, when some matter of the small "company of British merchants trading to the East Indies" was mentioned in its proceedings, (for it could scarcely have attained to the dignity of a debate,) and had declared that even the Nabobship of Bengal would yet be a British province, there cannot be the slightest doubt that he would have been listened to with the utmost incredulity. But what would have been the degree of ridicule of the wits of the honorable House of Commons, if he had proceeded to declare that Bengal would not form the boundary of Great Britain would yet be the sovereign of an Indian territory more than five times the size of France, and more than ten times the size of the British Isles, governing more than one hundred and fifty millions of subjects, and influencing a hundred and fifty millions more? The next matter of surprise might be, that the British force in Hindostan would probably exceed that of the whole army of France in the time of her most splendid monarch, Louis XIV., a force of 300,000 men and 1,000 pieces of artillery in the field; completing the political and moral prophecy, by predicting that a little more than a couple of generations would witness its completion. It would have required the largest measure of personal respect, to make such a soothsayer listened to with patience. His views would have been called dreams, his calculations rejected as the conjectures of a disordered fancy, his anticipations ridiculed as the sport of a spirit willing to try the utmost extent to which public council could be deluded by the passion for conquest or the inspirations of oratory.

The country in which this vast establishment has been founded, is among the most magnificent in the world. From north to south, from the snowy immacies of the great chain which rises between India and Tartary to the

low and fertile provinces of the south, from the bold and rocky heights of the Malabar coast to the level shores of Coromandel, the land exhibits every noble and productive variety of landscape—the deep and luxuriant valley, the mountain crowned with forest, a vast central table-land, possessing almost an European climate, and exhibiting the chief productions of Europe between the tropics ; a multitude of rivers, sufficient, even, in that land of the sun, to fertilize the soil—a great peninsula, flanked on the east and west by two of the noblest streams in the world, the Indus and the Ganges ; and with its sides, from Bombay to Cape Comorin, and from the Cape to Calcutta, washed by the ocean.

The character of its people, at once festive and mysterious, exhibiting the most artless simplicity with the most subtle craft, and combining the rudeness of peasant life with the most solemn and gorgeous superstition, corresponds to the powerful lights and shades of their climate. Its fields and forests possess the animals most remarkable for their strength, their sagacity, their courage, and their use ;—the elephant, the lion, the tiger, and the horse. Even its architecture shares the general spirit of a land where splendor is studied alike in the magnificent and the minute ;—temples and monuments, built by emperors, and worthy of imperial wealth, topped with domes covered with enamel and gold, and sparkling in an eastern sun ; while below, walls covered with elaborate sculpture, formed of every marble, and inlaid with every gem, exhibit a taste, which, however opposite to the classic severity of Europe, yet shows that the elements of beauty exist everywhere, that talent is confined to no one climate, and that the sense of beauty acts as vividly in the bosom of the untutored Indian as in the refined cultivation of Europe.

The conquest of a country of such vast extent, diversity, and power, by a small island at the distance of half the circumference of the globe, undoubtedly will excite feeling and inquiries surpassing those with which we are accustomed to regard the usual routine of worldly affairs. India, for a thousand years or more, had been the continual seat of governmental violence and popular suffering. Successions of local tyrants crushed by some one greater tyrant, or absorbed into his empire only to emerge, on its breaking up, like tigers from the fragments of their cage, and return with their dry jaws and thirst for blood, to a still more ferocious renewal of their oppression, covered the land with misery. Even this lot was not the most desperate. The country, from which the local tyrants drained its life, drop by drop, was periodically stricken to the dust by the sudden and irresistible blow of invasion—the Persian overrun it from the west, the Tarter rushed down with his cavalry from the north, and the whole strength and spirit of the land, helplessly buried under those barbarian multitudes, had scarcely revived, when a new influx of invasion buried it in the dust again. Even the occasional splendors of her dynasties cost her dearly ; nothing could be more evanescent ; and with the passing away of each throne came civil slaughter.

Even its position, in the centre of the most ferocious, war-loving, and savage nations of Asia—the Persian continually looking from his barren and mountainous provinces, upon the exuberance of the golden peninsula ; the Scythian of the desert, driven alike by hunger and rapine to make incursions, from age to age, upon the timid and unprepared Hindoo, in the midst of his treasures and his harvests, seemed to have laid it under a perpetual sentence of exposure and devastation, a continual anathema of nature against its peace ; a vineyard, whose grapes bloomed only to catch the eye of the spoiler ;

with its fences broken down by the wild boar, the foot of the robber trampling on its beauty, and the snake and the tiger usurping the place of the lord of its vintage.

There is no exaggeration in this course of calamity, notwithstanding the casual pomp of isolated regions of the great peninsula in other days, or the beneficial changes introduced by some of those sovereigns, who, from time to time, start up in the most ruined countries. But what must be the unchanging character of Indian suffering, where the diadem was always lost or won by the sword, where the sovereign lived in the midst of domestic conspiracy, busied in its punishment or made restless and furious by its fears; and the people, under the heaviest and haughtiest despotism, relaxed or violent only according to the indolence or the passion of the ruler; where the throne was but a lion's den, and the slaughter and plunder of the population was wholly regulated by the degree of satiety or hunger of the royal brute enclosed. Yet it is in this country that the most powerful and comprehensive effort of restoration ever known in Asiatic annals has been made, and that too by the interposition of Great Britain.

If this restoration had originated and been consummated by some neighboring power, suddenly civilized, and dispensing its civilization—if some Cyrus the younger had arisen in Persia, cultivating the arts and morals of the west, and shedding them like the seeds of a rich harvest into the desolate soil beyond the Indus; we might have attributed the result to the natural course of things. But if the map of the world had been spread out, and one had been requested to lay his finger upon the probable protector, the sovereign, and ultimately the regenerator of India, Great Britain would have been the last country to whom would have been assigned this mighty undertaking. Who would rationally have looked to a company of merchants for almost unlimited conquest? to an Island, then not containing six millions of people, and at the distance of ten thousand miles, for the acquisition, the defence, and the administration of an empire of a hundred and fifty millions of men?

Is it that there is a moral law, like the physical, requiring that the balance shall be moved at the extremities? that the restoration of the decayed forces of nations shall proceed, like the electric streams which rush from the poles and expand in brilliancy and power over the equator, that there is a constant providential provision for renewing the spirit of mankind, operating at distances of time and space, upon which no one can calculate until it presents itself to the senses—a mighty gulf-stream of influences and impressions, powers of renewal, and means of human improvement, constantly making its silent but irresistible path across the great and disturbed ocean of human affairs? Whether this principle be the true solution, or whether some still more hidden and benevolent instrumentality exists in the councils of Providence, India and Great Britain undoubtedly present the most prominent instance of a united purpose and a combined action for the attainment of the most exalted results in the history of modern affairs.

INDIA, as delineated by the ancients, comprised the whole tract of country from Persia in the west to China in the east, and was bounded on the north by Tartary, and on the south by the Eastern Archipelago. Hindostan proper, however, lies within the Himalaya mountains, the Indus, the Burramoota, and the Deccan, although the countries of the last mentioned boundary are usually included by Europeans. The Himalaya chain of mountains is understood to commence to the northward of the city of Cabool, where it

stretches, under the Affghan name of *Kindoo Koosh*, to the confines of Cashmere, a distance of four hundred and forty miles. Here it gives passage to the Indus, on the farther side of which, assuming its own more appropriate appellation, (meaning the abode of snow,) it pursues a south-easterly direction, separating India from Thibet, till it is lost to observation in the unexplored country beyond Bhootan. It is supposed, however, to traverse afterwards the most southern provinces of China, gradually sinking in elevation until it reaches the Chinese sea. This stupendous range is reckoned the loftiest in the world, affording, for at least one thousand miles, a series of elevations twenty-one thousand feet above the level of the sea, with various summits rising beyond that height about six thousand more.

The more elevated portion of the mountains, so far as they have been surveyed, are composed of primitive rocks, but more especially of gneiss, with only occasional veins of granite intermixed, and beds of micaceous slate. The other constituents are hornblende slate, chlorite slate, and chrystalline limestone, supporting clay slate and flinty slate; with sandstone towards the base, forming the southern steps of the chain. No trace has yet been discovered of volcanic action; and these sublime mountains may be supposed to retain the identical shape which they received when the crust of the globe was first formed. Neither are their elevated summits subject to the changes of the seasons which elsewhere modify the face of nature, but their peaks of primitive rocks are covered with everlasting snow. In the names given to different parts of the range—Himadri, Himarat, Himachil, and Himachil—*snow* is always the distinctive appellation. Himalaya, (the great collective name,) it need hardly be added, is one of the gods of the country, the father of the holy Gunga, and the step-father of Siva the Destroyer.

Running for a certain distance, nearly parallel with this range, there is another of inferior elevation, composed of the same materials, but with sandstone as the principal surface rock, which forms the southern barrier of the valley of the Ganges and the Jumna. There are besides, three mountain ranges disposed in a very remarkable manner along the sides, and across the base of India. The western, or Malabar range, commences at Kandeish, and stretches along the coast a distance averaging about forty miles, till it terminates near Cape Comorin, overlooking the Indian Ocean.

During this course, the primitive rocks are frequently seen above the surface, sometimes in peaks of granite six thousand feet (and one, it is said, seventeen hundred feet more) above the level of the sea; but the distinguishing geological feature is the superincumbent trap in the northern part of the range, and the iron-clay or laterite in the south. The first of these basaltic formations confers upon the landscape a character of wild and romantic beauty, the hills sometimes rising in vast terraces, and sometimes in tabular masses, with deep gulfs between, the whole covered with forests of teak, and the other majestic trees of India.

The primitive rocks of the continent appear again in the Island of Ceylon; the elements, however, which compose them, being frequently in such proportions as to confuse the geologist. Quartz, hornblende, and dolomite are found, but not in mountain masses, with the recent formations of limestone and sandstone, the latter forming a belt around the whole island, between low and high water mark—the mountains here in continuous chains, like those of the main land, and rise, in some cases, to the elevation of 5,000 feet, with one or two peaks 1,000 feet higher.

Returning to the continent, the eastern or Coromandel range commences

at the valley of Coimbatore, where it may be said to issue from the western or Malabar range; and it extends northward to about the same latitude, where the latter begins. Its general elevation is lower, and for this reason the rivers, which have their sources in the lofty table land between the two ranges, (which are commonly, though improperly, termed *ghauts*,*) descend, with few exceptions, through its valleys and gorges into the Bay of Bengal. The loftiest portions yet surveyed, do not greatly exceed 3,000 feet. The sides and base of the mountains are composed of granite, gneiss, and mica-slate, interspersed occasionally with clay slate, hornblende slate, flinty slate, chlorite and tale-slate, and primitive orchrystalline limestone.

The Vindhya range stretches across the country in such a manner as to form the base of an irregular triangle, the two other sides of which are the Coromandel and Malabar chains. The Vindhya mountains, however, have comparatively little geological connection with the peninsula, farther than the Krishna river, and should rather be considered as a portion of the general scheme of Central India. The grand and peculiar feature of the whole of this surface is the superincumbent trap, which is said to cover an area of 200,000 square miles. The other rocks are granitic, with sandstone; but the whole of India is peculiarly barren of more recent formations than the latter. The coal strata are numerous throughout the whole country. A matter worthy of mention, however, and hardly susceptible of explanation is, that the rarity of organic remains, both in the stratified rocks and diluvial soil, is the most striking phenomena in Indian geology.

Connected with the western limits of the Vindhya range, by a curved line of hills, are the Aravulli mountains, which stretch almost to Delhi, and serve as a barrier between Central India and the western desert. These mountains rarely exceed 2,000 feet above the level of the sea, although Mount Aboo, in the neighborhood, is supposed to rise to the height of 5,000 feet. Their composition is granite, including sienite.

The Indian Desert, a geological feature of a different kind, but not less remarkable than the others, extends laterally from the Aravulli range to the valley of Sinde. On the north it meets the valley of the Sutledje, and on the south is lost in the Runn, or great salt marsh of Cutch. From Hyderabad, as far north as Oock, in looking eastward from the river, the visible horizon is a bulwark of sand, frequently 200 feet high, guarding the valley of the Indus like the wall of a fortress. This is the commencement of the Desert, which is well characterized by its native name, *Maroosthali*, or the region of Death. It consists, with the exception of a few oases, of hills of loose and heavy sand, which sometimes change their position and shapes at the caprice of the wind, and which, but for the intervention of the Aravulli mountains, would long ago have submerged the whole of Central India. The Runn is an immense morass of salt and mud, the area of which is estimated at 8,000 square miles. The salt deposits are chiefly formed by the river Looni, rising in the Aravulli; and in some places the incrustations are so thick as to have the appearance of snow. This line of desert, whether of land or salt, stretching northward to the Sutledje, is the grand defence of India on the west. It is skirted by the valley of the Indus, beyond which the sandy desert is continued. The country of the Punjaub, therefore, forming the north-west corner, between the desert and the Himalaya, affords the only point of access in this direction for an army.

* A pass through a mountain; applied also to a range of hills, the ford of a river, and also a landing place upon a river side—particularly where duties are collected.

It is obvious that a region so securely enclosed within natural barriers, must have remained, for a considerable period, unknown to the rest of the world. Before the veil was withdrawn, India had arrived at maturity; and the wandering Europeans found, in the country of the Eastern barbarians, a civilization as refined as their own, though so strange and peculiar as to perplex as well as to astonish them. As for the country now called Hindostan, it appears to have been divided among various petty princes; although one powerful kingdom, known to the Macedonians as the territory of the Prasi, extended for some distance on both sides of the Ganges.

Another striking feature of India is her rivers. The Indus, forming the north-western boundary of Hindostan, is conjectured to have its source upon the northern declivity of the Callas branch of the Himalaya mountains, and flows, 900 miles in length, into the Arabian Sea. It takes a general W. N. W. course past Ladak, and receives the larger river Shyook, N. W. of Ladak, whence the united streams run through the country of little Thibet, and after cutting a passage through the great Himalaya range, are joined, about one hundred and twenty miles south of the mountains, by the Abocseen, and lower down at Attock, where it is two hundred yards wide, and both deep and rapid, by the river of Cabul. The river is crossed here by a bridge of boats, constructed like that used by Alexander, and described by Arrian. The bridge is only allowed to remain between November and April, when the river is low; and the construction of it is completed in the course of six days. South of Attock, the Indus enters a plain, but soon afterwards winds among a group of mountains as far as Hanabah, whence it pursues a southerly course to the sea. The breadth of the river at Kaharee-Ghat is about 1,000 yards, with a channel 100 yards across, and twelve feet deep. The banks in this vicinity are very low, and in summer are so much overflowed, that the stream expands in many places to a breadth of fifteen miles. In latitude $28^{\circ} 55'$ the Indus receives the Punjab rivers, and rolls past Mitlum with a width of 2,000 yards, and a depth near the left bank of four fathoms. Here the main stream takes a S. W. course to Bukkur, with a direct channel, but frequently divided by sandbanks. At this point, the country on both sides is of the richest nature, but particularly on the easterly bank, where it is flooded by innumerable channels, cut for the purpose of throwing the water in a south-easterly direction into the interior. About seventeen miles south of Bukkur, the Indus sends off a branch to the west, called the Larkhaun river, which, after making a circuit, and expanding at one point into a large lake, twelve miles broad, rejoins the main stream fifty miles below the point of separation. The insulated territory, called Chandokee, is one of the most fertile in the Sinde dominions. About one hundred and sixty miles below Bukkur, is Sehurun; and between these points the river flows in a zig-zag course nearly S. W., the intervening country being richly watered, and divided by its ramifications into numerous islets, containing the finest pasture. The distance between Sehurun and Hyderabad is one hundred and five miles; the banks seldom exceed eight feet in height, and the neighboring grounds are usually covered with tamarisks. The main river opposite Hyderabad is 830 yards wide, and five fathoms deep; but the channel becomes narrower and deeper as it approaches Tatta, sixty-five miles below the capital. Shifting sandbanks also occur in many parts between these latter points, to such an extent as to perplex the navigator. The country north of Tatta, which might be rendered one of the richest and most productive in the world, is left in a state of sterility, presenting to the eye only dense thickets of tamar-

saline shrubs, and other underwood. About five miles south of Tatta mences the Delta of the Indus. The river here divides itself into two ches, that to the right being called the Buggaur, whilst that to the left own as the Sata. The latter is by far the larger of the two, and a little w the point of division has a breadth of 1,000 yards. It divides and livides itself into many channels, and precipitates its water into the sea even mouths, within the space of thirty-five miles; yet such is the vioe of the stream, that it throws up sandbanks or bars; and only one th of this many-mouthed arm is ever entered by vessels of fifty tons hen. The Buggaur, on the other hand, flows in one stream as far as ajee, within six miles of the sea, at which point it bifurcates, forming arms, which fall into the ocean twenty-five miles apart. A sandbank, ever, which crosses its upper part, close to the apex of the delta, renders ift for navigation. The land enclosed by the Buggaur and Sata exla, at the junction of these rivers with the sea, to about seventy miles, so much, correctly speaking, is the existing delta; but the river covers its waters a much wider space, and has two other mouths, still further, namely, the Seer and Khoree, from which, however, the waters have a diverted by the rulers of Sindé into canals, for the purposes of irriga. If, therefore, these forsaken branches be included, the base of the a, measured in a straight line from the westerly to the easterly emboure, extends one hundred and ten miles in a S. S. E. direction. The instancy of the stream through the delta makes the navigation both diffi- and dangerous. Vessels drawing eight feet of water find themselves und at the very entrance of the Seeta mouth. The employment of s is out of the question, and the navigation of the *doondees*, or small na- boats, is so tedious, that no communication of any importance could be t up between Hyderabad and the sea, except by steamers, the use of sh, in a country like Sindé, would be attended with extreme difficulty. tides rise in the mouths of the Indus about nine feet at full moon, and a flow and ebb with great violence, particularly near the sea, where they d and abandon the banks with equal and incredible velocity. They are perceptible more than seventy-five miles from the sea, or about twenty- miles below Tatta. The quantity of water discharged by the Indus is ed to be 80,000 cubic feet per second, nearly as much as is discharged he Mississippi, and about as much as is discharged by the Ganges, the r great river of Hindostan, in the dry season. This discharge, provided calculation be accurate, must be attributed chiefly to the greater length in course in high and snowy regions, to its numerous and large tributa- , and to the barren and arid nature of the soil through which it passes; let the Ganges, on the other hand, expends its waters in irrigation, and sees the inhabitants of its banks with rich and exuberant crops. The In- has numerous affluents, none of which, however, deserve any particular rtion, except the Sutledje, which is the most easterly of all, takes its rise r Garoo, on the great plain north of the Himalaya mountains, enters the in at Shipkee, where it is 10,484 feet above the level of the sea, runs in urrow mountain valley for upwards of one hundred miles, and enters the iberly plain at Ropur, whence its course is south-westward to its junction a the Indus. The other rivers of the Punjab, besides the Beas, which is affluent of the Sutledje, are, proceeding westward, the Ravee, the Chenab, the Jylum. The last three, all of which rise on the southern side of the at mountain range of northern India, join their waters with those of the

Sutledje, in the twenty-ninth degree of north latitude, and the seventy-first degree of east longitude. The rivers of the Punjab are generally navigable up to the place where they issue from the mountains.

The Ganges, the other and principal river of India, forming its north-eastern boundary, watering its most fertile regions, takes its rise near the central chain of the Himalaya mountains, and flowing 1,500 miles in its course, empties into the Bay of Bengal. It consists of two principal heads, the Bhagirathi and Alcananda. The former, though neither the largest or longest, is considered by the Hindoos as the true Ganges. It issues about twelve miles above Gangoutri, from under a low arch called the "Cow's mouth," at the base of a mass of frozen snow, about 13,800 feet above the level of the sea; with a mean breadth of twenty-seven feet, and a medium depth of twelve inches. It forms a junction with the Alcananda at Deoprang. The resulting stream, with a width of about eighty yards, assumes the name of the Ganges; and at Hurdwar enters the great plain of Hindostan, at an elevation of only 1,024 feet above the level of the sea. It flows thence, with a smooth navigable stream, to the ocean, a distance of 1,350 miles, diffusing abundance on all sides by its waters, its products, and the facilities it affords for internal communication. Its chief tributaries are the Jumna, Ramgunga, Goompty, Goygra, Sone, Gunduck, Cosi, Mahanunda, &c. They vary in length from 300 to 600 miles; and except the Sone, flow towards the Ganges from the north. About two hundred miles from the sea, the delta of the Ganges begins to be formed. Of its two principal arms, which form the outermost of the whole series, the eastern is the larger, and preserves the original direction of the main stream, together with its name; but the western arm, or Cossim-bazar branch, called afterwards the Hoogly, is considered by the natives the true Bhagirathi, and is invested by them with the greatest portion of sanctity. The entire delta between the two principal arms is a vast alluvial flat, nearly two hundred miles in breadth, intersected by numerous rivers, interlacing each other in all directions, and which enter the sea by nearly twenty different mouths. The region round the mouths of the Ganges, termed the Sunderbund, is a pestiferous tract, covered with jungle, and swarming with tigers and other beasts of prey. At the distance of 500 miles from the sea the Ganges is thirty feet deep, and it continues of that depth, at the least, until it approaches very near its mouth. The rate of descent from Hurdwar to the sea averages about nine inches per mile, but nearly two-thirds of the entire fall takes place before reaching Cawnpore. The mean rate of the current in the dry season is less than three miles per hour, but in the wet season it is often from five to six miles, and in particular situations, from seven to eight miles. Its banks are commonly precipitous on the side upon which the current impinges, and shelving on the other side. The force of the stream, when the river is at its height, sometimes breaks down the banks, which are composed of a loose and yielding soil, with such rapidity, that an acre of land has been seen to disappear in less than half an hour! From the large quantity of mud brought down by the river in the wet season, and other causes, its mouths are obstructed with bars and shoals. The Hoogly is less so than the eastern arm, but no ship drawing more than fifteen feet of water, can navigate the latter with safety; and the East India Company's ships, which were usually from 1,000 to 1,200 tons burthen, and drew above twenty-two feet of water, loaded and unloaded at Sangor Island.

The annual inundation of the Ganges is owing chiefly to the tropical rains. This, as well as other rivers in Bengal, begin to rise in consequence of the

rains in the mountains at the end of April, their rate of increase for the first fortnight being about an inch per diem, and the total rise amounts by the end of June to between fifteen and sixteen feet, or half the entire height it attains, before any quantity of rain falls in Bengal. But from the latter period, when the rains there become more general, the medium increase of the water is about five inches a day; and by the end of July all the lower parts of Bengal contiguous to the Ganges and Brahmaputra, are under water. The Ganges decreases, at the average rate of half an inch per diem, from the end of November to the latter end of April, when it is lowest in Bengal, although the rains in the mountains have already begun to augment it in the upper part of its course. It is estimated that the quantity of water discharged by the Ganges, per second, in the dry season, is 80,000 cubic feet, and in the rainy season 405,000 feet; being an average, for the year, of 180,000 cubic feet per second. The quantity of earth brought down by the river is very great. The total annual discharge of mud is 6,368,077,440 cubic feet; the weight of which, according to Mr. Lyell, would exceed sixty times that of the great pyramid of Egypt.

The Ganges, like the Brahmaputra, the Amazon, and several of the European rivers, is subject to the phenomenon of the *bore*, or a rapid rush of the tide in a perpendicular face, up the river to a considerable distance. It is especially strong at spring tides. This occurs in all the mouths of the Ganges, and particularly in the Hoogly, through which branch it ascends as far as Culna, or even Nuddea, two hundred miles from the sea. The column of water is sometimes a dozen feet in height, near the mouth of the river, and often five feet high opposite Calcutta. Its appearance is that of a monstrous billow in a storm, or the dash of a foaming surf; its sound resembles that of a steamboat, but infinitely louder. Sometimes it takes one side of the river, sometimes the other; but it never extends over the whole basin. The time of its approach being well known, hundreds of boats may be seen rowing, as for life, towards the middle of the river, the crews urging on each other with wild shouts or shrieks, though at the moment no danger may appear; but soon afterwards the spectator is made sensible how necessary was the precaution, as the *bore* foams past with tremendous noise and velocity. But with all the difficulties and dangers of the Ganges, the English owe almost as much gratitude to it as the Hindoos themselves, for unquestionably to it they are indebted for their Indian empire. It is the great military highway, which enabled them eventually to conquer and maintain the rest of their possessions. Its value to the natives is incalculable. It is, and always has been, the grand route of communication and traffic in that country, throughout which the roads adapted for the conveyance of goods are very few. Not only the main stream, but all its tributaries from the north, are navigable for large or small boats, to the very foot of the mountains, for more than half the year; thus forming a most extensive system of inland navigation. The number of boatmen, in such a region of rivers, where almost every cultivator and fisherman is also occasionally a navigator, is immense. At the present time the gross amount of commerce embarked on its waters may be estimated at \$70,000,000, independent of the inland trade, which has doubtless not a little increased with that of the population, and the greater degree of security afforded to commerce under British sovereignty.

It may be doubted if any river in the world has on its banks so many populous cities. Upon different branches of the delta are placed Calcutta,

Moorshedabad, and Dacca, the three great cities of Bengal, with a united population of about one million ; besides Chinsura, Chandunagore, Hoogly, Cutwa, &c. Proceeding upwards we find Rajemahl, Monghir, Patna, Benares, Cawnpore, &c., with myriads of villages, temples, and bungalows. There are no bridges across the Ganges, after it has emerged from the mountainous region ; and the natives who attempt to cross it where boats are not used, do so by means of empty water-jars. The native craft used in the Ganges vary greatly in different parts of its course. The flat clinker-built vessels of the western districts give way about Patna to lofty, deep, and heavy boats, which navigate the river thence to Calcutta. In the Sunderbunda, again, the shallowness of the streams requires that the vessels should be without keels ; and the banks, in those places, being unavailable for the tracking-rope, rowing is the chief method of propulsion.

The Ganges, from Gangoutri to Sangor Island, is considered holy by Hindoos of all castes, though in some places much more so than in others. Hindoo witnesses, in British courts of justice, are sworn upon the water of the Ganges, as the Christians and Mussulmans are upon their sacred books. The water of the Ganges is believed by the Hindoos to purify from all sins ; many ablutions and suicides accordingly take place in it ; and the feet of the dying, when they reside within an accessible distance, are invariably immersed therein.

British India covers a surface of 1,000,000 square miles, being as large as that portion of the United States lying east of the Mississippi, and contains a population of about 150,000,000—seven times greater than that of the United States, and four times that of France. And if that country may be considered favored which contains within itself everything which is necessary for the maintenance of its inhabitants, India may be considered the most fortunate upon the globe. With abundance of rice for their daily food, of cotton for their clothing, and abundance of mud and leaves for their dwellings, the Hindoos were still poor. The occasional failure of their crops admonished them that something more was to be done, if they would not perish, than gather in their harvests and consume them ; and the necessity they were thus under, of combination and of the interchange of productions, and of the different species of labor, led to new wants, as well as new means of supply.

Fortune here again smiled upon them ; for their country, immense in its extent, various in its climates, and endlessly diversified in its hills and vales, mountains and forests, streams and rivers, answered all their demands. When cotton did not suffice for their wants or wishes, the juice of the mulberry-tree was spun for them into silk, by insects far more ingenious than themselves, and their sheep yielded warmer wool than that which the Greeks reported them to obtain from plants. They dyed their manufactures with a plant which the ancients called after them *indicus*, corrupted by the modern British into *indico*, and then *indigo*, and with lac munject, and other substances. Salt they obtained for their rice, from lakes, mines, encrusted earth, and the ocean ; and sakkar, called by the Europeans *succe*, sugar, &c., from the date-palm, which they had in common with the Africans and the northern Arabians, and from their own cane, with which they enriched the West Indies and other portions of the world. Wheat and barley from the Tartarian regions were early acclimatized in Southern India. They received coffee from the early Arabians, who brought it with them into Malabar. The tobacco plant, the Indian corn, the pepper and the potato of the New World found with them a congenial home, and also the opium of Asia Mi-

nor and Europe. The bread-fruit tree of the South Sea Islands, three of which will support a man during eight months of the year, was at their command; and the cocoa-palm, which produces cordage and thatch, food and oil, milk and toddy, with bowls to hold the nourishing or refreshing liquid, grows spontaneously on their coasts. They share with the natives of the Eastern Archipelago in their cloves, nutmegs, pepper, ginger, and other condiments; and the tea-plant, so long supposed to be the peculiar characteristic of China, grows wild in the woods of Eastern India, and in Nepaul. Plants, trees, fruits, and flowers of almost all kinds, they either possess indigenously, or have made them their own; they have a climate and a soil for the productions of the east, the west, the north, and the south, and their vast country might consequently seem intended for the garden of the world.

If the inhabitants of India are thus favored, it follows that the reverse cannot be the case, except from the abuse or neglect of the gifts of nature. In the fertility of the country, in its adaptation for all the productions which minister largely to the wants and wishes of the human race, and in the intelligence and industry of the people, most assuredly we may venture to predict their elevation, in the social scale, under a refined, enlightened, liberal, humane, and Christian government.

The first importation of cotton made into England from India was in 1789, and it came not direct, but through Denmark and Flanders, to the extent of 2,000,000 lbs. Since that period the importations into Great Britain have increased to 100,000,000 lbs. Cotton is not used in India merely for dress, but for carpets, curtains, beds, awnings, cushions, &c., &c. Flax is cultivated only for the oil, which is extracted from the seed. The consumption of cotton in India is estimated at 750,000,000 lbs., exclusive of amount exported.

Sugar was first used in England in small quantities, in the houses of the opulent, at the early part of the seventeenth century. In 1700, ten thousand tons were used in England, which increased gradually to two hundred and fifty thousand tons, the quantity which barely suffices for the wants of the present day. In 1790 the East India Company received some samples of East India sugar, with reports from their agents upon the different modes of cultivation, and other details; and the importations, which commenced in consequence, amounted, in 1847, to eighty thousand tons.

Indigo was an article of considerable importance, even in the earliest commerce of the East India Company, and grows luxuriantly from the equator to the thirtieth degree of latitude; but in India the best is produced in Bengal and Bahar, between latitude 23° and 27° north, and 84° and 90° of east longitude; in all other parts the product is inferior. The annual produce of all the provinces of Bengal is estimated at about 10,000,000 lbs., produced upon about 1,250,000 acres of land; the planters, upon an average, cultivating about 2,500 acres each.

Silk is another great staple of Indian foreign trade, and is also, like cotton, more useful in the clothing of the inhabitants than is commonly supposed. In 1792, the quantity of raw silk exported from India to Great Britain was 401,445 lbs., and in 1829 it had increased to 1,387,754 lbs. At the present it is estimated to be 2,000,000 lbs. The modern trade in raw silk, however, may be considered as yet in its infancy, as the culture of the mulberry, and the treatment and choice of worms in the various regions of India, are still matters of controversy. The total value of raw and manufactured silk, imported into Great Britain from British India, is estimated at \$8,000,000.

Opium was, for a considerable period prior to the disturbances of 1839, an article of great and rapidly increasing export to China, from British India, the Malay Islands, and elsewhere. The white poppy may be said to take the place, in Indian agriculture, which the vine and olive occupy in that of Southern Europe. Opium was not early known as an article of commerce in India; but by the year 1786, the cultivation appears to have increased sufficiently, as to attract the attention of Lord Cornwallis to the drug as a means of producing revenue. The crop, like that of indigo, is very precarious. It was stated in evidence before a select committee of the British House of Commons, that the finest crops, and promising the most abundant produce, the country, in fact, being covered like a sheet with the white flowers of the poppies, may be destroyed in the course of less than an hour by a hail storm, thus rendering it difficult to determine what cultivation had been upon the ground.

Tobacco is produced in India in immense quantities, where almost every person smokes; but very little is exported, owing to the inferiority of the Indian article, Europeans having given but little attention to its cultivation. In various parts of India excellent tobacco is produced, and nothing is wanting but care and skill to enable the Indian cultivators to grow the best tobacco and obtain the best prices for it in the English market.

The cultivation of tea in India is yet in its infancy, although the actual importations of the Assam Company have proved beyond a doubt, that in that region it can be produced of a good and sound quality. Various parts of the Himalaya range, particularly the British provinces in the north-west, are likewise well adapted for the plant; and experiments are now in progress, which, in union with the Assam operations, may result in making an important addition to the commercial resources of India.

India, including Ceylon, exports about 13,000 tons of coffee, and this is within about 1,000 tons of the entire consumption of Great Britain. Nearly 200,000 tons, however, are required for the consumption of all the other importing countries collectively, and this quantity is chiefly supplied by America and Java. Wherever the plant has been fairly tried, whether in the Deccan or Bengal, it has succeeded to admiration; and perhaps the only real obstacle which it has had to encounter is the disadvantageous tenure of short leases in India.

At the present time Great Britain receives from India eight or nine million pounds weight of pepper, a great part of which she re-exports to other countries. The rice and wheat of India are both inferior to that of most other countries, for the same reason that its cotton and sugar are inferior, both being the produce of a rude husbandry and a rude preparation. Rice is scalded instead of being kiln-dried; and wheat is never dried at all, except in the sun. The quantity of wool exported from India is estimated at 6,000,000 lbs. A great variety of plants are used by the Hindoos for cordage; but *sun* and *jute*, commonly called hemp by Europeans, though totally distinct from the true hemp plant, are the only exports for the purpose. Hemp, however, is a native of India, and grows wild in the north-western parts and in the Himalaya; but is used only for an intoxicating secretion, called *bang*. Frequent attempts have been made to introduce the Cochineal insect into India, but without any degree of success thus far. The other articles of export we will but barely allude to:—they are saltpetre, hides, ginger, nutmegs, mace, cinnamon, cloves, rhubarb, and other medicines. India is rich in mineral salts, and every year adds to the number of coal strata

discovered; and besides deposits of other precious stones, there are diamond mines of considerable value, both in the central and southern country. And it need hardly be added, that India teems with animal life in all its forms; but it is impossible, at the close of this article, to give even the most meagre catalogue. We have before alluded to those insects which the Hindoos set to spin clothing for them; at the sheep which are robbed of their wool for a similar purpose; at the elephants destroyed in vast numbers every year, that their teeth may minister to the luxury of Europe; at the countless cattle which give up their hides for the shoes, saddles, &c., &c., of distant countries. Isinglass is likewise obtained from their fish, together with sea-maws and other strange delicacies for the epicures of China. And it would indeed be an endless task to give an account of the natural forests of India, with the vast variety of woods, both useful and ornamental. The *teak*, on the coast of Malabar, supplies materials for the ship-yards of Bombay; and it is also found on the opposite coast of Coromandel, and in other parts of the country, more especially in Martaban, upon the eastern side of the Bay of Bengal. The *bamboo* grows spontaneously everywhere within the tropics, and is used for the construction of houses, bridges, boats, &c. It sometimes attains the thickness of two feet in circumference at the largest part, and from fifty to a hundred feet in height; a single knee of the plant being in this case sufficient to form a pail or bucket. Mahogany is now common throughout India, although introduced only in 1795, and is very little inferior to the finest production of Honduras. Maple, logwood, oak, fir, horse-chesnut, with almost all the European fruit-trees, succeed as well as in their native countries; and cocconut, sandal, cinnamon, and a host of others, yielding gums, dyes, and condiments, are either indigenous or very early acquisitions. The natives are careless in the management of their forests; so much so, that in some districts, a deficiency, in several of the woods in common use, is already beginning to be felt; but there is also a national feeling among them, allied as usual to their religion, which studs the whole country with those shady groves, which are so welcome to the fainting traveller. The present world of the Hindoo is indissolubly linked with the two worlds of the past and the future. His misfortunes in this life are conceived by him to be the consequences of sins committed in a former state of being; and the actions of the good, he believes, to have relation to an existence beyond the grave. His ostensible purpose in marriage is to obtain a son to present the funeral cakes; but if children should fail—if no human being should be left for the rites of the dead—his *mango* and *tamarind* trees are still living things which pour the dew of heaven as libation to his manes, and obtain for him, from grateful hearts, the blessing of those who are ready to perish. To plant a grove, is to a Hindoo, what founding a hospital or building a church is to a European; but with this difference, that in the case of the former, the duty is more invariably performed, and never from worldly motives. When a European traveller, in journeying through the country, pitches his tent every morning on the green sward of some refreshing grove, eats at his pleasure of its fruit, and drinks of water from its wells of solid masonry, he does not, perhaps, think of the beautiful and kindly feeling, which, many years before, had prepared these things for his refreshment and repose. A native, however, invariably repays the founder with a brief prayer, or at least a soft and grateful thought; and this is all which the latter had mentally stipulated with the unknown objects of his bounty.

Art. II.—DEBTS AND FINANCES OF THE STATES OF THE UNION:**WITH REFERENCE TO THEIR GENERAL CONDITION AND PROSPERITY.*****CHAPTER IV.***Middle States—Pennsylvania.*

THE great State of Pennsylvania, although among the last of the dishonored States to suspend its payments, and the first to apply sound principles of finance to the correction of evils that had flowed inevitably from an unsound credit system, has, from the magnitude of her debt, as well as of her resources, and the general prominence of her position in the great Union, become almost a synonym for American discredit. Every foreign poetaster, scribbler, and smatterer in the effort to attract attention to what he imagines wit, sneers at American slavery and Pennsylvania repudiation. With none of those people is information very abundant or very accurate, and their vituperation is proportioned to their ignorance. While we deplore the latter, we may deal indulgently with prejudices envenomed by the consciousness that the rising glories of America must shortly overshadow the gorgeousness of the British empire, which holds millions of human beings in a degraded bondage, and with which ultimate repudiation is but a question of time. While the indebted States of America find, in their rapidly accumulating wealth, the means of meeting their debts with annually increasing ease, the British government has each year found the burden of her debt more onerous, and the necessity of diminishing its amount by taxing its interest more imperative. So onerous has the weight of her debt become, that even while thrones are tottering, and the armies of Europe are daily gathering strength, and assuming hostile attitudes, the necessity of cutting down the expenses of her armament has called into life a powerful party, pledged to financial reform. While the American States have nearly got through their financial embarrassments, the countries of the old world are about to encounter more serious difficulties. It is indeed not matter of rejoicing, that any nation fails in its contracts; but hopeless insolvency should teach bankrupts charity for those who falter for a moment, amid accumulating disasters, over which they have had no control.

The position of Pennsylvania grew out of three radical errors. 1st. The government system of internal improvements; 2d. unsound financial legislation; and, 3d. a corrupt connection with a rotten banking system. The operation of these three primary causes upon the State politics, inevitably produced that ruin and dishonor, from which an entire change in principles and policy have alone extricated her, and an abandonment of which will again as surely plunge her into difficulties. Pennsylvania early saw the necessity of internal improvements, by which her inland resources should be made available on her seaboard. In the year 1789, she commenced a series of improvements of various descriptions, projected at different periods, and

* The first of this series of articles, on the Debts and Finances of the several States, was published in the *Merchants' Magazine* for November, 1847, vol. xvii., page 465, treating the subject of State debts generally; chapter II. followed in the December number, same volume, and was devoted to the New England States—Maine and Massachusetts. Chapter III., which was published in the March number, vol. xviii., page 243, related to New York. It is the intention of the writer to continue the series until it embraces every State in the Union.

which encountered various difficulties and embarrassments, that retarded the execution of some, and produced the abandonment of others. She early saw the necessity of connecting the great lakes with the seaboard; but not until the great work of New York was undertaken, did she fairly embark, in 1825, in that extensive line connecting the Ohio river with Philadelphia. From 1791 to 1828, there was expended in Pennsylvania, for roads, bridges, and inland navigation, \$22,010,554; and works were then in progress that would, it was estimated, be completed in 1831, at an additional expense of \$12,000,000. From that time expenditure was rapidly pushed, amid occasional efforts to stay the growing excitement. In 1829 a bill was passed, authorizing the expenditure of \$3,511,000, which was vetoed, on account of the magnitude of the sum, by Governor Shultz. It was then cut down to \$2,000,000, and passed.

The great work of Pennsylvania is the canal and railroad connecting Pittsburgh, on the Ohio, with Philadelphia. The Columbia Railroad, leaving Philadelphia, extends 82 miles to Columbia, on the Susquehanna. From Columbia a canal continues the line 172 miles, to Hollidaysburgh. From Hollidaysburgh a portage railroad conveys the merchandise of the canal 36 miles over the Alleghany ridge, at a height of 2,369 feet above the sea, and delivers it to the western division of the canal at Johnstown, which conveys it 105 miles farther, to Pittsburgh, making 395 miles. Some portions of the canal were finished and in operation in 1830; but the railways were not completed, and freight and passengers carried over the whole line, until 1834.

The first cost of the whole line was.....	\$14,861,820 82
The expenditures, over receipts, prior to 1835.....	222,496 06
Cost prior to completion.....	<u>\$14,583,816 88</u>
Annual interest on cost, 5 per cent.....	\$729,191

The main line of State works, in its course through the State, from east to west, passes through the centre of population of the Commonwealth, traversing the richest agricultural districts in the United States, and connecting at different points with other canals and railways branching to the iron and coal regions. It passes through the fertile and densely populated counties of Delaware, Chester, and Lancaster, to the river Susquehanna, connecting with the West Chester railway in Chester county, and the York and Wrightsville railway and Susquehanna and Tide Water Canal at Columbia, on the river Susquehanna. At this point, nearly all the heavy tonnage from the city of Baltimore, as well as Philadelphia, to the Western States, is received upon the main line, from the Susquehanna and Tide Water Canal and the York and Wrightsville railway, and is carried through Pennsylvania 311 miles, to Pittsburgh. From Columbia, the line passes up the valley of the Susquehanna through the county of Dauphin, connecting with the Union Canal at Middletown, and the Cumberland Valley railway and the Harrisburgh and Lancaster railway, at Harrisburgh. At Middletown it receives the coal of the Swatara mining district, one of the richest in the State, from the Union Canal, and at Harrisburgh the rich products of the great Cumberland valley are shipped to market. Passing up the Susquehanna, to the mouth of the Juniata river, twelve miles above Harrisburgh, and 43 north-west from Columbia, it connects with the Susquehanna Canal from the north. By this tributary, in addition to the agricultural productions of northern Pennsylvania, it receives the tonnage of the great Wyoming, Shamokin, and Lykens

Valley anthracite, and West Branch bituminous coal fields; the trade of the great anthracite iron district in the vicinity of Danville and Bloomsburgh; the masses of white pine lumber from the sources of the north and west branches of the Susquehanna; and the superior malleable charcoal iron from the valley of the Bald Eagle. Here the canal leaves the Susquehanna, and passes up the valley of the Juniata through the counties of Perry, Juniata, Mifflin, and Huntingdon, to the town of Hollidaysburgh, at the eastern base of the Alleghany mountains. These counties produce large quantities of wheat for market, and are the seat of the manufacture of the celebrated Juniata iron. Huntingdon county alone has about twenty furnaces, thirty forges and bloomeries. A large portion of this iron is sent west on the State works, to be converted into bar and round iron at the Pittsburgh rolling mills. From Hollidaysburgh large quantities of bituminous coal are shipped eastward on the canal, to the cities on the seaboard, and to the iron works in the eastern and middle counties. From thence the main line extends west through the county of Cambria, and between the counties of Indiana, Armstrong, Butler, and Westmoreland, and through the county of Allegheny to the city of Pittsburgh, on the Ohio, at the confluence of the Monongahela and Alleghany rivers. For the last 125 miles, it traverses one continued bituminous coal field, filled with iron ore, and most of the distance rich in agricultural productions. In the valley of the Conemaugh and Kiskiminetas brine springs are abundant, and vast quantities of salt are annually manufactured, and sent upon the canal to market.

There was also 314 miles of lateral canals completed at about the same time, at a cost of \$6,471,994. The law authorizing the construction of the main line was passed February 25, 1826, and the work commenced on the 4th July following. The whole line was opened to travel in 1834. The lateral canals were commenced about the same time, and opened in 1835. These works, and their cost, may be enumerated as follows:—

Main line.	Miles.	Cost.	Lateral works.	Miles.	Cost.
Columbia Railroad...	82	\$3,380,127 55	Delaware Division	59.75	\$1,238,027 69
East Division Canal.	172	4,594,146 08	Susquehannah Div.	39	1,039,216 77
Portage Railroad....	36	1,634,357 69	North Branch Div.	73.25	1,398,412 77
West Division Canal.	105	2,823,192 71	West Branch Div.	72	1,580,351 84
			Beaver Division...	24.75	481,383 06
			French Creek Div.	45.25	724,663 06
Total.....	395	12,381,823 98		314	6,471,994 11

These works constitute a very extensive system of improvements, but it was conceived without judgment, and executed without skill. In fact, it experienced the evils which almost universally attend works undertaken by governments. They were laid out less with a view to their ultimate success, than to benefit private lands; consequently better routes were commanded by private companies, which have necessarily drawn business from the State lines. The contracts were political jobs, shamefully performed for enormous sums, so that reconstruction and repairs have amounted to more than the original cost, and the whole will probably now be supplanted by a railroad.

Nevertheless, the evils arising from this source were as nothing as compared to the disasters which followed the policy adopted in 1836, in connection with the late National Bank. At the close of the year 1835 the above works were completed, and the State debt amounted to \$24,589,743. The tolls on the public works in that year were \$684,357, and the expenses \$431,626, leaving \$252,731 nett income, which was apportioned to the in-

interest on the debt, in addition to a tax of 2½ per cent on collateral inheritances, a tax on personal property, the auction duties, county rates and levies, escheats, and dividends on turnpike, bridge, and navigation stock. By stopping expenditure, and allowing the business of the works to develop itself, the swelling products of these taxes would soon have defrayed the interest, and permitted a relaxation of taxes. The State had reached a point in her improvement system, at which she could have suspended operations without loss. A scheme of direct taxation, to pay the interest on the State loans, which had been introduced under Governor Wolf's administration, was admonishing the people of the inconvenience of a public debt. Everything indicated that the further progress of the State improvements was to be deferred, till time had tested the productiveness of the finished works, and the increasing development of the State resources had invited and justified their further extension.

At this juncture, the charter of the late National Bank expired, and Congress refusing to renew it, the most strenuous exertions were used by the institution to procure a State charter, and the temptations that it held out to the State prevailed; but its favors proved fatal to the recipients. The State patronage, which had grown up under an expenditure of some \$25,000,000 among jobbers and contractors, naturally produced a strong party in favor of the most extravagant extension of all the public works. Money in London and throughout the world was abundant, and the last loans which Pennsylvania had contracted in 1832-3, to complete her works to the extent of \$2,500,000, had sold at a premium of \$114 a \$115 for \$100 of 5 per cent stock, redeemable after 1860. The spirit of speculation was wild all over the country; and when the late National Bank stepped forward, with offers of near \$10,000,000, to feed this excitement, it is no wonder that it prevailed, and the act of 18th February, 1836, was passed, entitled, "an act to repeal the State tax on real and personal property, and to continue and extend the improvements of the State by railroads and canals, and to charter a State bank, to be called the United States Bank." The first section of this act rescinded the system of taxes, which had been devised for the protection of the public credit. The tax on personal property and the county levies, which had produced \$300,000, were repealed, while, by other sections, more than two millions of dollars, to be received from the bank, were appropriated at once to the prosecution of company works, and the commencement of new ones, under the direct charge of the State, and nothing appropriated to the sinking fund, in place of the repealed tax. To enable the Commonwealth to consummate this wild extension of improvements, the bank obligated itself, whenever required by law, to loan the State, against certificates of stock, payable in 1868, \$6,000,000, giving par for the stock if the interest should be 4 per cent, and 10 per cent premium if the interest should be 5 per cent per annum. Also, to advance to the State, as a temporary loan, \$1,000,000, at 4 per cent interest per annum, reimbursable at the pleasure of the State, within twelve months from date of the loan.

By the acceptance of the charter, the bank stipulated to pay the State of Pennsylvania—

\$2,000,000 at such time as the government might require.

500,000 on the 3d March, 1837.

2,000,000 in instalments of \$100,000 per annum for 20 years.

\$4,500,000

In addition to this, the bank obligated itself to subscribe \$675,000 to the capital stock of various railroad and turnpike companies, if requested to do so by the directors of the companies, any time within one year from the passage of the charter.

To sum up the whole in one sentence, the bank obligated itself to pay, as a bonus for its charter, \$4,500,000, to purchase Pennsylvania stocks, at a high rate, to the amount of \$6,000,000; to loan the State, at 4 per cent interest, for a period not exceeding one year, \$1,000,000; and to subscribe to railroad and turnpike stocks, \$675,000. Total, \$12,175,000. The burdens thus imposed upon the bank were equal, in the aggregate, to at least \$6,000,000 in cash. A singular evidence of the infatuation which marked those years!

Under the impulse of this act, and of the influences which effected its passage, a new series of improvements were begun at once, all of which, after the expenditure of many millions, now forming part of the public debt, and the cause of increased taxation, have been abandoned by the State, and have passed, most of them, into the hands of companies which have paid no consideration for them.

It even seems that the State has not limited its gratuities to the works thus commenced. The Beaver division, and the Wyoming line, on the North Branch, embracing forty-three miles of canal in actual use, and the French Creek Feeder, costing together \$1,222,927 81, and all of them *finished* in 1835, have been given away to companies, and leave the State with a less extended system of improvements now than it had when the Bank of the United States was chartered.

Soon after the United States Bank undertook these heavy payments, the money market began to lower, and increasing stringency was followed by the universal suspension of 1837. Then it was that these stocks, which the institution derived from the State for its own notes, paid out on the public works, became its own support abroad. As it paid out the notes of the old institution for cotton in the Southern States, so did it give the credits of the new institution for State stocks, as well those of Michigan, Indiana, and Mississippi, as those which it had stipulated to take of Pennsylvania, and this cotton and these stocks formed a basis for its credits abroad; and when it failed, in October, 1839, about three years after it had purchased its charter of Pennsylvania, its agent at London pledged the following stocks for a loan to meet bills of exchange, which it had sold in New York on Hottingeur, of Paris, without authority, and for the sole object of breaking the New York banks, by drawing specie for the proceeds of the bills:—Pennsylvania 5 per cents, \$5,117,906; Mississippi, Maryland, Indiana, Michigan, and Illinois stocks, \$9,333,000. Total, \$14,405,906.

The progress of the State works in Pennsylvania was marked by the declining credit of the State; and while the United States Bank was compelled to lean upon that sinking credit for its support, the stocks were no longer readily available abroad. The 5 per cent stock of the State, which had sold for 115 in 1833, would not sell at all in 1839. Inasmuch as that the State had repealed her taxes, and depended altogether upon borrowing to pay interest, the inability to borrow involved failure, and this becoming imminent in 1840, the State attempted to supply her exhausted means by selling to the banks the right to continue to refuse to pay their own debts. The necessity of some mode of taxation was, however, apparent, and, on the 11th June, 1840, was passed "an act to create additional revenue, to be applied

towards the payment of interest, and the extinguishment of the debt of the Commonwealth," estimated to yield about \$600,000, the sum supposed sufficient, with the other resources of the Commonwealth, to liquidate the interest account, without further resort to loans for that purpose. This act was to continue in force five years, but was apparently more to raise credit than an actual revenue. The articles taxed were those purely of luxury, such as gold watches, pleasure carriages, household furniture exceeding in value three hundred dollars, together with bonds, bills, and notes of solvent obligors, bank stock, or stock of other corporations, yielding dividends of at least one per cent, salaries of public officers, and real estate. This act failed to produce the desired revenue. In place of \$600,000, but \$33,000 only was derived from its operation in the year 1841, in that year, and a new plan was proposed, which was a palpable violation of the Federal Constitution, which forbids the issue of bills of credit by the States. The old colonies had been in the habit of issuing that description of paper, and the immense evils which flowed from it had produced the clause in the Federal Constitution. Pennsylvania violated that clause, and has suffered severely from the consequences.

By the act of the 4th of May, 1841, entitled "An act to provide revenue to meet the demands on the treasury, and for other purposes," certain banks were authorized to subscribe for a loan to the Commonwealth, to an amount equal to a fixed per centage, therein stated, on their respective capitals; the amount of such loan to be placed in the treasury for the use thereof, in notes of said banks of the denomination of one, two, and five dollars. By the terms of the law, the loan was redeemable at any time within five years, and it was peremptory that it should be paid, and the notes authorized to be issued, withdrawn from circulation on or before the 4th day of May, 1846. The act also provided that the banks issuing said notes should receive them at par value in payment of debts due these institutions. It was thought that by making their redemption dependant on the faith of the State, as well as on that of the banks by which they were issued, a safe and reliable currency would be constituted, while the State would be largely benefitted by a loan at one, instead of five and six per cent, as on previous occasions.

The amount of this paper, called "relief notes," so issued, was originally \$2,220,265, and these speedily depreciating and becoming the only medium in which the State received its revenues, completed its embarrassments. Without credit, and with a worthless depreciated paper currency, destructive to the industry and welfare of the State, bankruptcy was inevitable. The public works had been stopped, and an army of contractors clamored for pay. Their obligations were considered paramount, and to pay them a law was passed to sell the bank stock owned by the State. These had cost the Treasury \$4,200,000, and they realized to it, \$1,395,411 84 in 1843; and in February and April of the same year a law was passed authorizing the cancellation of \$682,087 of the relief notes, followed in May, 1844, by a law ordering the cancellation of \$200,000 of the relief notes per annum, which has however not been effected. In the meantime, the revenues of the State were utterly disordered, and in November, 1841, Governor Porter notified the banks that by the terms of their charters they were bound to loan a sum not exceeding 5 per cent of their capital to the Commonwealth, to hold themselves in readiness to do so on the 1st of the following February, and by these and other means he had accumulated in the Bank of Pennsylvania \$859,000, to meet the February interest of 1842. That institution was by law the de-

pository of the State funds, and its agent for disbursing interest. Its credit becoming shaken, the Governor and State Treasurer endeavored to induce it to pay out the interest in advance, as well to quiet the public as to get the money out of the bank; but he received continued assurance from several of the directors, up to Friday evening, the 28th, of the bank's ability to pay over on the 1st of February. On Saturday, the 29th, however, in consequence of some of the other banks refusing to receive the notes of the Bank of Pennsylvania, a run was made on that institution, which was met until the usual closing hour of the day. But being satisfied that this run would be continued on Monday, and convinced that the funds of the Commonwealth had been paid out to meet other demands upon the bank, the governor procured an injunction, and recovered from the institution \$500,000 of the State's money. The State interest was thus delayed for February, and August could not be paid at all. A law was passed, however, authorizing the issue of 6 per cent scrip to the creditors instead of money, and this was continued until the improved mode of assessments and revisions of the tax laws so far restored the finances of the State as to permit resumption in February, 1845. In 1844, the difficulties attending taxation induced a proposition to sell the State works, the main line for \$16,000,000, and the Columbia Railroad for \$4,000,000, without success.

By the law of 22d April, 1845, the tax list and mode of assessment was revised, and "upon all stages, omnibuses, hacks, cabs, and other vehicles, used for transporting passengers for hire, owned, used, or possessed within this Commonwealth, by any person or persons, or by any corporate body or bodies, and upon all annuities over two hundred dollars, except those granted by this Commonwealth or by the United States, and upon all property real or personal, [not taxed under existing laws,] held, owned, used or invested by any person, company or corporation in trust for the use, benefit, or advantage of any other person, company, or corporation, excepting always such property as shall be held in trust for religious purposes, three mills upon each and every dollar of the value thereof." Certain other descriptions of property were taxed two mills, and other descriptions one mill. The aggregate values so taxable in 1845 and in 1848, according to the triennial assessments, are as follows:—

Years.	Subject to three mills.	Subject to two mills.	Subject to one mill.	Total.
1845.....	\$416,472,675	\$286,222	\$3,543,312	\$420,302,209
1848.....	457,853,229	851,401	5,036,353	463,240,987
Increase.....	\$41,380,554	\$65,179	\$1,493,041	\$42,938,778

This is a most gratifying increase of the taxable property under a severe imposition. The collateral inheritance tax was by the same law raised from 2½ to 5 per cent, and the result has been an increase from \$33,000 to \$55,000 revenue.

The value of the property in Pennsylvania has thus, it appears, increased in three years by an amount equal to the whole of the debt which she owes upon the same general heads of assessment. The population of the State has also increased to an extent almost equal to that of any other. By the census of 1840 it was 1,724,033. The votes polled at the general election, 287,693. Since then the increase has been as follows:—

	1840.	1844.	1848.
Population.....	1,724,033	1,924,460	2,125,600
Actual votes polled.....	287,693	331,876	362,974

mus the burden of the tax has been lightened in the double ratio of increasing numbers and swelling wealth. The progress of the revenue is seen in the following table:—

SUM AND EXPENDITURES OF THE COMMONWEALTH OF PENNSYLVANIA FOR THE FISCAL YEARS ENDING RESPECTIVELY NOVEMBER 1843-44-45-46-47-48.

	1843. Dollars.	1844. Dollars.	1845. Dollars.	1846. Dollars.	1847. Dollars.	1848. Dollars.
in real and estate...	553,911 88	751,210 01	1,318,332	1,445,112	1,380,781	1,350,129
l & R. tolls.	1,019,401 15	1,164,325 84	1,154,591	1,357,203	1,587,995	1,550,555
s	8,254 08	12,027 27	11,778	13,235	15,293	21,454
ion com....	24,802 18	24,220 00	18,900	18,348	21,700	22,500
duties....	82,170 10	68,145 41	71,248	68,290	53,831	56,153
in bank div.	26,529 76	46,705 55	86,675	75,384	128,307	118,048
corp. stks	38,510 79	52,879 88	80,147	94,892	124,555	140,359
in licenses.	47,090 10	40,150 94	86,112	45,888	84,963	83,306
lars' "	63,857 24	64,847 75	72,908	109,473	143,684	131,165
ers' "	1,550 87	1,483 93	1,427	3,372	2,291	2,184
ers' "	7,452 13	6,460 12	1,712	6,544	5,598	2,566
tre, &c., li-						
ses.....				1,180	930	557
shot laws.	310 25	338 34	99	392	398	305
a fines....	11 40	1,165 93	7,338	15,080	11,090	17,161
in writs &c.	37,769 86	32,921 88	30,820	57,820	47,184	30,682
ch off'rs.	5,074 17	1,833 54	2,596	12,355	13,811	19,394
Flint's tax.	22,377 05	21,631 96	33,650	45,468	42,743	55,359
l fines, sales						
l mails, &c.	1,083 54	3,431 25	5,639	2,679	5,018	1,121
in enroll'm't						
laws.....	1,900 00	1,100 00	1,600	2,095	3,420	1,965
in loans...			55,788	110,083	118,977	113,431
s			2,150	12,490	220,089	140,000
in turnpike						
i b'ge st'ks	19,181 29	26,075 96	1,199	1,253	1,076	1,950
also lands.	2,427 24	650 68			1,761	
and interest			2,335	4,204	2,043	2,308
aded cash.			8,577	15,535	2,342	14,528
sats			909	2,380		905
of public						
ers.....	1,010 00	500 00	1,564	1,716	1,257	1,644
nd States...	342 23	44 87				
llaneous...	60,313 27	7,425 68	1,458	6,605	6,379	1,526
	2,752 51	2,688 71				
Total.....	2,009,023 53	2,331,765 43	3,010,062	3,529,057	3,977,025	3,831,776
	453,130 78	274,181 13	663,851	384,886	384,678	680,890
	2,462,153 31	2,605,946 56	3,673,914	3,913,943	4,361,704	4,512,667
stock....	1,395,411 84					

the expenditures of the State have been cut down under different regulations to allow of the application of a large amount to the debt. The item of non schools and ordinary government expenses indicate the most important reductions.

ANNUAL EXPENDITURE IN DETAIL OF THE STATE OF PENNSYLVANIA.

	1843. Dollars.	1844. Dollars.	1845. Dollars.	1846. Dollars.	1847. Dollars.	1848. Dollars.
est on loans		50,542 74	1,784,182	1,984,623	2,002,240	2,005,740
ic improv..	747,263 92	719,126 08	661,340	694,505	690,575	998,593
of gov't...	295,480 74	254,453 11	239,304	216,632	200,113	230,550
in expend..	42,448 69	19,151 16	18,831	28,655	25,837	26,724

ANNUAL EXPENDITURE IN DETAIL OF THE STATE OF PENNSYLVANIA—CONTINUED.

	1843.	1844.	1845.	1846.	1847.	1848.
	<i>Dollars.</i>	<i>Dollars.</i>	<i>Dollars.</i>	<i>Dollars.</i>	<i>Dollars.</i>	<i>Dollars.</i>
Pens. and grants	46,007 76	35,369 60	41,858	31,425	24,850	22,706
Charit'e inst'ns. }	408,674 36	23,356 65	14,643	15,492	29,000	27,000
Com. schools... }		267,560 88	224,331	193,221	196,804	176,590
Loans	82,717 34	20,269 10	26,033	25,356	209,064	148,378
Guaranty of int.			20,125	45,721	30,800	32,500
Domestic cred'ts.	1,261,236 78	95,837 35	14,761	7,501	5,133	13,343
Canc'd r'f notes.	508,000 00	274,087 00	85,000	176,300	150,000	169,000
Damage on public works....	1,218 95	55,735 00	26,303	25,343	12,467	26,453
Special comm'ts			1,007	1,109	98	308
Revenue "			2,236	.....	.....	2,253
State library....	3,341 87	3,094 00	1,240	724	1,924	2,044
Public buildings and grounds..	5 50	1,123 56	1,137	810	1,802	3,054
East'n reservoir Penn. canal..	.....	.....	.....	13,319	16,515	2,973
Outlet lock at Wells' Falls..	.....	.....	.....	.....	16,550	1,600
Weigh lock at Beach Haven.	.....	.....	.....	.....	.....	6,353
Penitentiaries... }	30,972 06	13,308 00	13,972	17,209	14,915	7,347
H. of Refuge... }		4,000 00	4,000	4,000	4,000	4,000
Conveying convicts and fug..	809 42	1,264 97	711	145	679	763
Nicholson lands.	1,984 75	600 21	222	1,277	1,751	190
Escheats	912 85	237 18	799	557	35	771
Philadelp'a riots .....	.....	.....	45,252	13,019	61	39
City of Pittsb'gh .....	.....	.....	30,000	.....	.....	.....
Abate't of State tax .....	.....	.....	17,685	33,455	40,369	41,523
Premium on silk	3,425 76	62 71	18	.....	.....	.....
State magazine .....	.....	.....	.....	.....	.....	1,000
Miscellaneous..	12,314 52	2,247 00	4,027	1,953	5,223	5,168
Total.....	3,583,324 02	1,847,385 15	3,289,028	3,529,264	3,680,813	3,935,376
Balance on hand Dec 1.....	274,181 13	663,851 00	384,886	384,678	680,890	577,290
Total.....	3,857,505 15	2,511,226 15	3,673,914	3,913,943	4,361,704	4,512,667

As a general result, in four years there has been an excess of \$87,349 30 in revenue over expenditure, including a payment of \$600,000 relief notes, and \$40,000 to domestic creditors. The amount of these relief notes now in circulation is \$752,864, according to the amounts issued and since cancelled and funded. These continue to circulate at a depreciation, and therefore form the medium in which most taxes are collected, and they are paid out at par to the recipients of the State interest, subjecting them to loss in addition to the deduction of the three mill tax, and the State to discredit. The present governor in his message makes the most remarkable proposition after the experience of the State as connected with banks; namely, to sell new charters to those banks that require it, in consideration that they loan the State an amount sufficient to take these notes out of circulation. It is certainly in the highest degree desirable that the circulation should be cleared of such depreciated paper; but in face of the experience of the State, is it wise to barter the State's honor with institutions with which connection hitherto has proved so disastrous? In every case where Pennsylvania has accepted pecuniary aid from corporations as a condition for granting privileges, she has suffered in the end.

the stock of the State of Pennsylvania is invariably registered in the name of the proprietor, and can be transferred only by him in person or by his attorney. The transfers are effected at the Bank of Pennsylvania, in Philadelphia, where the interest, 5 per cent, is payable half-yearly, namely, February and August 1st. The principal is payable at the State Treasury, Harrisburg. Since the resumption of the payments in February, 1845, this stock has been paid to a considerable extent in relief notes that are depreciated. That is to say, whatever notes are in the Treasury, received for State stock, are paid out *pro rata* for dividends. The depreciation on this paper stock the February interest last amounted to \$12,500, and from the amount is deducted the three mills per annum, or 1½ mills every six months on \$100. The amount actually netted just now to the holder of the stock after these deductions is \$2 35 per cent half yearly, or \$4 70 per cent per annum. It is the case, that inasmuch as that the revenues are collectable every month, the State has usually to anticipate a portion of her income. The February payments are about \$1,000,000, and there was in the early December 1, \$577,290. The collections in December and January amount about \$200,000, consequently the Executive is obliged to borrow \$200,000 to complete the February payments, and this is reimbursed when the public works are in operation in the spring. A law for this purpose has recently passed the Legislature. Had it not been for the extraordinary repairs required during the past year, from causes inherent in the misconstruction of the works, the surplus on hand would doubtless have accumulated to an extent that would have obviated this necessity. The expenditure on the works of the year was very great, reaching \$1,067,394, exceeding the estimates by \$18,860. This excess is explained by the fact, that the floods of 1847 were more extensive than supposed, and the expenses were increased by subsequent breaches. Of the above amount, the sum of \$381,796 56 was for extraordinary repairs, not entirely chargeable to the current year, for \$326,545 37 used for repairing damages by the floods of 1847. The rebuilding of the Freeport aqueduct cost \$44,115. The general expenditures were of course increased by the enhanced price of labor and materials, at points where it was requisite to use all energy in repairing breaks to prepare for the spring season, the advantages of which would have been entirely lost to the State by delay. The funding or cancelment of the "relief notes" would also relieve the pressure upon the State finances, as well as the creditors, from an imposition altogether discreditable.

The progress of the State debt for many years has been as follows:—

AGGREGATE PENNSYLVANIA STATE DEBT.

	Funded.	Relief notes.	Int't certificates.	Dom. creditors.	Total.
.....	\$24,265,303	.....	.....	.....	\$24,265,303
.....	24,329,004	.....	.....	.....	24,329,004
.....	25,327,008	.....	.....	.....	25,327,008
.....	25,229,003	.....	.....	.....	25,229,003
.....	29,914,003	.....	.....	.....	29,914,003
.....	33,301,013	.....	.....	.....	33,301,013
.....	32,674,356	\$2,220,265	\$914,442	\$1,514,332	37,819,395
.....	36,366,099	2,085,059	1,787,454	253,096	40,491,708
.....	34,880,184	1,688,264	2,614,601	206,461	39,290,461
.....	34,812,315	1,438,178	4,453,873	150,000	40,803,866
.....	36,739,267	1,258,572	2,888,803	99,761	40,896,393
.....	38,858,970	1,081,664	752,667	96,275	40,789,577
.....	39,220,325	931,664	380,865	96,095	40,628,949
.....	39,393,350	752,664	239,404	89,318	40,474,736

In December, 1835, when Governor Wolf retired from office, two months before the incorporation of the Bank of the United States, the State debt of Pennsylvania was \$24,589,748 32. It is now, exclusive of the amount received as a deposit from the general government, \$40,424,736, making an increase of the State debt, in ten years, of \$16,896,649 90, notwithstanding the receipt, in the meantime, of \$2,867,514 78 of surplus revenue from the United States, and of \$3,446,780 21 as premiums for bank charters.

Here is an increase of \$15,834,993 of debt, for which the State has obtained nothing whatever. If to this be added the United States surplus fund, the bank premiums, the taxes, and the proceeds of stock sold, the amount will be as follows:—

Increase of debt.....	\$15,834,993
United States surplus.....	2,867,514
Bank premiums.....	3,446,780
Taxes paid from 1845 to 1849.....	7,330,000
Proceeds of bank stock sold.....	1,395,411
Total.....	\$30,864,698

For this enormous sum the State has not only nothing whatever to show, but has parted with bank stock that yielded a handsome income, and also with public works that were valuable; and Governor Johnson now proposes to borrow \$1,000,000 more to recommence the system by extending the North Branch Canal! The result of the late election, by changing the predominance of parties in the control of State affairs, will work a radical change in the condition of the State finances. Thus we have seen that with the speculations that commenced with the operations of the United States Bank to obtain its charter, the State expenditure upon State works was pushed to a ruinous extent. The same influence produced the rapid multiplication of banks, which increased as follows, exclusive of the United States Bank:—

BANKS OF PENNSYLVANIA.

	No.	Capital.	Loans.	Specie.	Circulation.	Deposits.
January, 1830..	32	\$12,810,333	\$21,474,173	\$2,414,669	\$7,308,368	\$6,841,448
" 1834..	44	18,991,863	38,855,930	2,799,825	11,657,983	14,041,531
" 1837..	49	24,659,261	46,427,033	2,999,081	14,856,214	12,577,966
November, 1838..	49	25,155,783	38,696,788	3,612,253	11,792,948	10,135,863
January, 1848..	47	16,192,258	33,870,857	4,638,073	14,386,196	15,110,433

Since the great explosion of credit in 1837, the policy of the State has been to curtail bank credits, diminish the debt as fast as possible, and to pay taxes for that purpose. In accordance with that general policy, new charters have been steadily refused, and the applications of old ones for renewal rejected. Consequently, many charters have expired; and although many succeeded in getting bills through the Legislature, they were promptly vetoed by Governor Shunk. An extended and powerful interest was thus created against the Executive, which aided in effecting the change that took place, by a popular majority of 350 votes, in October last, in the State government. A bill, renewing four charters with an aggregate capital of \$1,980,820, already expired, was vetoed in April, 1848, by Governor Shunk. In addition to these are thirteen expired charters, with a capital of \$14,050,000, embracing the Girard and the Bank of Pennsylvania, which ruined the State credit in 1842, together with six charters, capital \$807,945, that expire in 1849, and thirteen others that expire before 1852. Altogether there are twenty-seven applications for new charters, capital \$18,855,787; twenty-two for renewals, capital \$9,000,000;

seven from old banks, for an increase of \$1,787,000 ; making fifty-seven nations for charters, for \$29,603,287, that, having influenced the removal of restraint of Governor Shunk's veto, expect success from Governor John- and he, in his message, indicates the policy of selling them the privileges, as means of taking up the "relief notes." The immorality of this poli- is scarcely be questioned. If it is right that banks should be chartered, it is right to make them pay for exercising a right. If it is not right, then we have the spectacle of a sovereign State willing to do what is wrong for a sum of money. It has also been proposed in Pennsylvania to pass a gene- banking law like that of New York, by which no charters will be renewed, all allowed to bank by depositing State stock at par, to the full amount of circulation, as security. The actual debt of the State is now as follows :—

PENNSYLVANIA STATE LOANS.

SHOWING THE SEVERAL LOANS OF THE COMMONWEALTH, AND THE ACTS OF ASSEMBLY AUTHORIZING THEM, THE RATE PER CENT INTEREST OF EACH, THE PERIODS WHEN REIM- BURABLE, AND THE AMOUNTS OF THE SAME AS THEY RESPECTIVELY STOOD ON THE 1ST OF DECEMBER, 1848.

Loan, per act of	Rate of int'l.	Reimbursable.	Amount.
2, 1821.....	6	June 1, 1841.....	\$26,951 80
1, 1828.....	5	December 1, 1846.....	295,461 15
9, 1827.....	5	" 1, 1850.....	999,311 15
24, 1823.....	5	" 1, 1853.....	1,998,407 09
18, 1828.....	5	January 1, 1854.....	798,474 64
22, 1829.....	5	December 1, 1854.....	2,197,849 55
7, 1829.....	5	April 1, 1847.....	50,000 00
12, 1830.....	5	March 4, 1858.....	3,998,395 47
21, 1831.....	5	July 1, 1856.....	2,481,711 83
30, 1831.....	5	" 1, 1856.....	299,096 43
30, 1832.....	5	" 1, 1860.....	2,343,777 64
5, 1833.....	5	" 1, 1860.....	300,000 00
16, 1833.....	5	" 1, 1858.....	2,540,010 56
1, 1833.....	4½	April 10, 1863.....	200,000 00
27, 1833.....	5	July 1, 1858.....	529,922 74
9, 1833.....	5	March 28, 1861.....	120,000 00
5, 1834.....	5	July 1, 1862.....	2,265,059 75
13, 1835.....	5	" 1, 1865.....	959,540 79
26, 1839.....	5	" 1, 1869.....	1,195,928 93
9, 1839.....	5	" 1, 1864.....	1,278,375 99
16, 1839.....	5	" 1, 1864.....	100,000 00
27, 1839.....	5	" 1, 1868.....	469,879 22
7, 1839.....	5	August 1, 1859.....	49,998 25
27, 1839.....	5	June 27, 1864.....	4,134,352 70
19, 1839.....	5	July 1, 1868.....	2,053,938 42
23, 1840.....	5	January 1, 1865.....	868,873 13
3, 1840.....	5	August 1, 1864.....	860,680 89
11, 1840.....	5	July 1, 1870.....	1,939,583 65
16, 1841.....	6	August 1, 1846.....	800,000 00
4, 1841.....	6	July, Nr. 1847.....	22,335 06
5, 1841.....	5	At ex. c. bk. ca.....	565,875 96
6, 1841.....	6	June 1, 1846.....	903,048 20
29, 1844.....	5	March 1, 1849.....	59,551 46
16, 1845.....	5	August 1, 1855, fund. cer.....	4,489,463 79
23, 1847.....	5	May 1, 1849.....	62,500 00
11, 1848.....	6	April 11, 1853.....	135,214 00
relief)			
4, 1841.....	0	May 4, 1846.....	752,664 00
certificates outstdg.			
27, 1843.....	6	August 1, 1843.....	44,631 60

300,000 tons of coal. If one half that stock should be drawn into the State, instead of paying away \$600,000 per annum for nothing, the value would be retained in the State and accumulate its resources yearly, adding to its taxables and lightening the general burden. It would seem, however, as is usually the case when they prevail to any extent, that chartered influences are too strong to allow of any movement that militates against their interests, more particularly as appears to be the case, that the interests of the stockholders are not strongly represented in the State—a fact recognizable in the payment to them of the relief notes and taxing the debt.

It is to be observed, that the immense losses and expenditure of the State of Pennsylvania to develop her resources, have been of very little avail. As, for instance, her coal trade has grown up from nothing in 1825, to 3,000,000 tons per annum. Of this vast amount, but 192,511 tons came to Philadelphia upon the State works; the Union, Lehigh, Schuylkill and Delaware canals, and the Reading Railroad, all private works, delivered the remainder.

ART. III.—THE PROPOSED RAILROAD ACROSS THE ISTHMUS OF PANAMA.

Those who have read the *Cosmos* of Baron Von Humboldt, must be deeply impressed with the novel, striking, and very interesting views there presented of the future progress and development of civilization in this country, as dependent upon and connected with the physical features of the vast continent we inhabit.

Without startling our practical readers with opinions that appear to be merely speculative or theoretical, (however true and pleasing we may regard them,) we will remark that it cannot escape the notice of the most superficial observer, that there must necessarily be a great dissimilarity between the wants, resources, means, and appliances of two people equally advanced in knowledge and the arts, one of whom exists in a compact and closely settled community, while the other inhabits a country of immense extent and of unbounded resources, the greater portion of which still remains to be conquered from the rude hand of nature. The most hasty glance at our present condition will suffice to satisfy the mind as to the real dependence of our national progress, both in form and amount, upon certain prominent and characteristic geographical peculiarities, such, for instance, as the broad and deep lakes of the North, the interminable rivers of the West, the lofty mountains of our central States, and the fertile savannahs of the South. It is undoubtedly true, that viewed in relation to these controlling causes, to favor the operation of which we seem to be eminently adapted by our spirit of enterprise, equally bold in conceptions and execution, the future development of society in the new world, offers to the contemplative mind the widest field of expectation and of wonder.

We already witness many striking effects of those causes. To some of them we have made a passing allusion. Another of these effects, and one immediately connected with the subject before us, is the character of those undertakings, whether public or private, by which the means of intercommunication, for the purposes of trade and travel, are established between remote parts of our territory. This character becomes more marked and peculiar, as the population of the country, and consequently its wants, are increased and ex-

tended. To meet these wants, and to bring out, in a form of practical utility, the hidden means by which they may be supplied, there is never wanting some bold and ingenious mind that sees the true connection of things however apparently distant, and is ready to propose a scheme of improvement, by which that connection may be established.

A ready example of this occurs to every one in the junction of the Northern Lakes with the Atlantic ocean, and in the name of De Witt Clinton, the author of this project, from the execution of which his name has received a great and enduring fame. But such projects will always encounter, in their beginning, the opposition of less ardent and enterprising minds. They are, in fact, somewhat in advance of their time; and we, who read the history of their slow progress towards completion, have to admire no less the Antean vigor with which their authors rise up after occasional defeat, than the grandeur of the schemes themselves, so far outstripping the calculations of ordinary men.

It is worthy of remark that such grand projects rarely have their origin in the scenes of business, and of merely practical life. Commerce is a science, as well as an art—and it is not to be expected that those whose attention is engrossed by plans of individual profit and advantage, or by the multiplied and complicated details of the counting room, should always be possessed of the taste and leisure for studying the principles upon which their art is founded. Accordingly, the whole history and literature of commerce show that those ideas and rules of action that regulate the commercial intercourse between nations, those combinations and discoveries that open new channels of trade, and those theories that comprehend and explain the laws and principles of commerce, are derived from the man of thought and reflection—from the political economist, whether a student in his closet, or a statesman in office.

In the report of Mr. T. Butler King upon the RAILROAD ACROSS THE ISTHMUS OF PANAMA, which we intend to lay in a brief manner before our readers, we see the final step in the achievement of a great undertaking, precisely similar in character to those of which we have just spoken.

When Mr. King first brought forward his plans for a system of mail steam packet communication between New York and Chagres, and between Panama and Oregon, he was compelled to invite private enterprise by offers of assistance from the government, to secure the co-operation of government by urging the great and serviceable addition that these vessels would prove to the naval force of the country in time of war, and to overcome the opposition of his associates in Congress by arguments and persuasions addressed to their pride, their interest, and their local connections. He foresaw that this railroad was sooner or later to follow as the consequence of the mail packet system—that it would very soon be perceived that the chain of communication (to use the common figure) wanted yet a single link to be complete—and that the argument at present applied with so much force, “we have now established a steam communication on the water between New York and the Columbia river, but in order to make it perfect we must have some easy, certain, rapid, cheap, and permanent means of transit across the isthmus, without which our lives are subject to great expense, irregularity, and inconvenience,”—that this argument, so valid and so obvious, would be immediately stated.

The enterprise, which, a few years since, was regarded by many as one of doubtful utility, and at least as being a little premature, is likely to prove one

most magnificent schemes of the age, and we congratulate the author upon his well deserved success and honor.

In the report before us, Mr. King has advanced far beyond his former position, (in respect, we mean, to this route across the isthmus,) by presenting new and very remarkable views as to the effect of this road upon the general commerce of the world, of which it is to make this nation the central seat and agent. These views, like those of Mr. King upon steam navigation with China, are founded upon commercial statistics, collected with industry, and compared together with originality. From their combination, and a study of their common relations, Mr. King has been led to the discovery of new laws and channels of trade; and if the experience of the past should establish the correctness of those principles of commercial intercourse which he has been the first to announce, his name will be hereafter permanently associated with an important epoch in the commercial history of our country.

We will proceed to give a brief synopsis of the report.

It is based upon a memorial of Wm. H. Aspinwall, John L. Stephens, and John Chauncey, praying for aid from the government of the United States to construct a railroad across the Isthmus of Panama. The memorialists procured a charter from the government of New Grenada, (originally granted to a French company, but afterwards forfeited,) which secures to them extensive privileges on the isthmus, provided the work shall be completed within eight years, and be commenced within eighteen months from the date of their grant. The memorialists are unwilling to engage in a work of such magnitude, and so remote from our own borders, without efficient aid from the government; and the object of Mr. King in his report is, to show that it is wise policy to extend such aid, and to point out the very striking and beneficial benefits that are certain to result from the construction.

The first step in the course of the argument is to mention a fact, explaining the superior advantages possessed by Great Britain over ourselves, and other nations, by means of her maritime position. This part of the report is interesting to be abbreviated.

Great Britain is principally indebted to her skill in commerce and manufactures for her commercial ascendancy, but she is also indebted in no small degree to her maritime position. She not only has the ports of the continent of Europe as her neighbors, but is fifteen hundred miles, or two weeks, nearer than we are to all the other parts of the world, except the Atlantic ports of the American continent north of the equator and the West Indies. The cause of this is, that all vessels bound from Europe to places south of the Line, or beyond either of the capes, cross the Atlantic to the Azores or Western Islands, for the purpose of finding favorable winds, while vessels from British ports run down to the same latitude and longitude without the necessity of crossing the ocean, to avail themselves of the same advantages. This difference in favor of British commerce, running through our existence as a nation, has been a most serious obstacle for our merchants and navigators to contend with, and has of itself been a vast item in favor of the British capital. Lieutenant M. F. Maury, superintendent of the Observatory, has, within two or three years past, proposed a more direct route for our ships from our ports to ports on the Atlantic side of the American continent, south of the equator and beyond Cape Horn, which will save about one thousand miles of the distance to those places, but all vessels bound round the Cape of Good Hope will be compelled to pursue the old route.

TABLE SHOWING THE SAILING DISTANCES FROM NEW YORK AND LIVERPOOL TO THE PRINCIPAL PORTS BEYOND OR AROUND CAPE HORN AND THE CAPE OF GOOD HOPE.

	From Liverpool.	From New York.
To Calcutta via Cape of Good Hope..miles	16,000	17,500
" " Horn.....	21,500	23,000
Canton " " 	20,000	21,500
" " of Good Hope.....	18,000	19,500
Valparaiso via Cape Horn.....	11,400	12,900
Callao " " 	12,000	13,500
Guayaquil " " 	12,800	14,300
Panama " " 	14,500	16,000
San Blas " " 	16,300	17,800
Mazatlan " " 	16,500	18,000
San Diego " " 	17,000	18,500
San Francisco " " 	17,500	19,000

"The construction of the proposed railroad across the isthmus will not only do away this advantage over us, now possessed by European commerce and navigation, but will turn the tide in our favor.

"The average distance from Liverpool, London, and Havre, to Panama, is four thousand seven hundred miles; from New York the distance is two thousand miles; from Charleston one thousand four hundred; from Savannah one thousand three hundred; from New Orleans and Mobile one thousand six hundred; making an average distance from our principal exporting Atlantic and gulf ports of about one thousand six hundred miles to Panama. If, therefore, we admit, for the sake of the argument, that European commerce with the Pacific ocean, the East India and China seas, will take the new route across the isthmus—these will be a difference of three thousand one hundred miles in our favor. Add to this the one thousand five hundred miles now against us, and we find that we shall gain by this channel of communication, in our relative position to those parts of the world, a distance of four thousand six hundred miles, or of forty-two days. *In the way out and home* we shall have the advantage of our European competitors of nine thousand two hundred miles, and eighty-four days, as compared with the present route."

The gain to us in time and distance, here stated, is limited by the supposition that European ships will carry their own goods as much as formerly, intended for the Pacific markets, and will go freighted to the eastern terminus of the proposed railroad. That, however, adds Mr. King, will not be the case.

On the contrary, "the large number of vessels bound to the ports of the United States for cotton, rice, tobacco, lumber, flour, provisions, &c., will bring the freights for those markets as ballast or cargoes, whence they will be conveyed to the railroad in our own fast-sailing coasting vessels and steamers, which will also bring to us the commerce of the Pacific. This is very obvious, because, if European ships were to sail with full cargoes direct to the railroad, they would run the risk of being compelled to return without freight, or come to the United States for it. We are so much nearer to the isthmus than the ports of Europe, and our means of communication and information will be so frequent and certain, our lines of steamers and coasting vessels so constantly on the alert, and will move with such celerity, that heavy European freighting ships will find it quite impossible to compete with them. If this view of the subject be correct, and we believe it is, the construction of this railroad will throw into our warehouses and shipping the entire commerce of the Pacific ocean. Our ports are on the very way-side from Europe to the Isthmus of Panama, and our lines of steamers and packet ships across the Atlantic will come laden with the freights destined for that channel of trade. The commerce, therefore, from Europe to the East Indies, China, and the west coast of this continent, will be forced to pursue the old route or fall into our hands. The following table shows, stronger than language could express it, the saving in distance and time which will result to our commerce from the

completion of this work, and the advantage it will give to us over our commercial rivals.

	New route from New York.	Old route from New York.	From Liverpool.
To Calcutta via....Cape of Good Hope....miles	....	17,500	16,000
Horn.....	....	23,000	21,500
Isthmus of Panama.....	13,400	....	....
Canton via....Cape of Good Hope.....	....	19,500	18,000
Horn.....	....	21,500	20,000
Isthmus of Panama.....	10,800	....	....
Shanghai via...Cape of Good Hope.....	....	20,000	18,500
Horn.....	....	22,000	20,500
Isthmus of Panama.....	10,400	....	....
Valparaiso via..Cape Horn.....	....	12,900	11,400
Isthmus of Panama.....	4,800	....	....
Callao via.....Cape Horn.....	....	13,500	12,000
Isthmus of Panama.....	3,600	....	....
Guayaquil via...Cape Horn.....	....	14,300	12,800
Isthmus of Panama.....	2,800	....	....
Panama via....Cape Horn.....	....	16,000	14,500
Isthmus of Panama.....	2,000	....	....
San Blas via...Cape Horn.....	....	17,800	16,300
Isthmus of Panama.....	3,800	....	....
Mazatlan via...Cape Horn.....	....	18,000	16,500
Isthmus of Panama.....	4,000	....	....
San Diego via...Cape Horn.....	....	18,500	17,000
Isthmus of Panama.....	4,500	....	....
San Francisco via Cape Horn.....	....	19,000	17,500
Isthmus of Panama.....	5,000	....	....

"These figures show that the new route across the isthmus will bring us more than an average of ten thousand miles nearer to the East Indies, China, and the ports of South America on the Pacific, and will actually, for all the purposes of navigation and commercial intercourse, bring the ports of the west coast of Mexico, California, and Oregon fourteen thousand miles nearer to us than they now are! With steamers on each side of the isthmus that will go fifteen miles an hour—a speed ascertained to be quite practicable—passengers, the mails, and small packages of light and valuable goods may be conveyed from New York to San Francisco in fourteen days, and from our southern ports in less time. Thus bringing these remote points, for all practical purposes, nearer than New York and New Orleans were twenty years ago.

"The average saving of time in our commercial intercourse with the west coast of America, China, and the East Indies, which will be effected by the construction of the proposed railroad, is exhibited in the following table:—

TABLE SHOWING THE SAVING OF TIME FROM NEW YORK, BY THE NEW ROUTE VIA THE ISTHMUS OF PANAMA, AS COMPARED WITH THE OLD ROUTES VIA CAPE HORN AND THE CAPE OF GOOD HOPE, TO THE PLACES THEREIN NAMED, ESTIMATING THE DISTANCE WHICH A COMMON TRADING SHIP WILL SAIL PER DAY TO BE ONE HUNDRED AND TEN MILES, AND CALCULATING FOR THE VOYAGE OUT AND HOME.

	1.	2.	3.	4.	5.	6.	7.	8.
	Miles.	Days.	Miles.	Days.	Miles.	Days.	Days.	Days.
To Calcutta.....	17,500	318	23,000	418	13,400	244	74	174
Canton.....	19,500	354	21,500	390	10,600	192	162	198
Shanghai.....	20,000	362	22,000	400	10,400	188	174	212
Valparaiso.....	....	....	12,900	234	4,800	86	...	148
Callao.....	....	....	13,500	244	3,500	62	...	182
Guayaquil.....	....	....	14,300	260	2,800	50	...	210
Panama.....	....	....	16,000	290	2,000	36	...	254

1. Distance via Cape of Good Hope. 2. Length of passage out and home. 3. Distance via Cape Horn. 4. Length of passage out and home. 5. Distance via Isthmus of Panama. 6. Length of passage out and home. 7. Saving via the isthmus over the route via Cape of Good Hope, out and home. 8. Saving via the isthmus over the route via Cape Horn, out and home.

To San Blas.....	17,800	322	3,800	68	...	254
Mazatlan.....	18,000	326	4,000	72	...	254
San Diego.....	18,500	336	4,500	82	...	254
San Francisco.....	19,000	344	5,000	90	...	254

"The employment of steam vessels would render the contrast in our favor still more striking. But the difficulty and expense of transporting heavy merchandise across the isthmus in its present state, and the distance round the cape, render the employment of steam in the carrying trade to the East Indies, China, and the west coast of America, quite impracticable. The most that can be done is to employ steam packets in the conveyance of the mails and passengers. Let this railroad be completed, however, and no part of the world will present as great advantages for the successful use of steam in ocean navigation as the Pacific. Coal is found on all its borders, both American and Asiatic, in the greatest quantity and perfection. Its quiet waters seem to indicate steam as the proper agent to be employed in their navigation. The spirit and genius of the American people, and the extent of our territory on the west side of the continent, proclaim clearly enough that we are to become the legitimate heirs of a vast commerce that shall spread fleets of steam ships over the bosom of this peaceful ocean.

"Steamers, with a speed of twelve miles an hour, would go from New York via the isthmus, (throwing out the fractions)—

To Calcutta in.....days	47	To Panama in.....days	7
Canton in.....	36	San Blas in.....	12
Shanghai in.....	35	Mazatlan in.....	14
Valparaiso in.....	17	San Diego in.....	16
Callao in.....	12	San Francisco in.....	210
Guayaquil in.....	9½		

We need make no apology to our readers for the length of this extract. It sufficiently recommends itself by the originality of its conceptions, and the logical clearness with which they are presented. It opens in prospect, and not a distant one, the commercial resources and means of wealth and enterprise, which are eminently suited to build up the power of this vast empire, and to hasten the time when it shall become the foremost nation of all the world, taking the place that is rightly due to its physical condition, to the character of its people, and to its free institutions.

And Mr. King suggests that it may have been owing to the sagacious discernment of this result, that European capitalists have refused to lend their aid to the accomplishment of an undertaking which will not only deprive them of the decided superiority they now possess over us in their intercourse with nine-tenths of the world, exclusive of ourselves, but will place us so far ahead in the race for commercial supremacy, that we can never be overtaken.

Mr. Alexander Forbes, in a work on California, published in London as far back as 1839, quoted by Mr. King, dwelt upon the favorable situation of that country for intercourse with other nations, and its capacity for commerce, should it ever be possessed by a numerous and industrious population.

"California has now been added to our territory on the Pacific. Its beautiful and commodious harbors, its delightful climate, the fertility of its soil, and its mineral wealth, are attracting thousands and probably tens of thousands of our fellow citizens to it. The most rapid means of communication should be established to facilitate their emigration, protect them in their new homes, supply their

* We are reminded here that some studious and zealous critics have objected to the length of some of the passages as given in Mr. King's tables. Though we have entire confidence in the sources of information on which Mr. King has relied, yet we are not at all careful to answer in this matter, since the corrections of these ingenious persons, even if fully admitted, are too trifling in the slightest degree to invalidate Mr. King's argument, which we may not uncharitably suppose to be less congenial to such minds than the barren statistics on which it is based.

sta, and to enable them still to participate in the blessings of our free institutions. They will be large consumers of our manufactures of every description, for some years to come, at least, of our agricultural products also."—(P. 7.)

From what we see at present we may expect that mining operations, and agricultural pursuits, will form the almost exclusive occupation of the inhabitants for many years to come, during which they will depend upon ~~are~~ for their supply of food, as well as of articles of manufacture. If our ~~pe~~ still continue to take the circuitous route round Cape Horn, it will be possible for us to compete with Chili, Peru, and other adjacent ports, in viding for the markets of California, flour, and other perishable articles. ~~is~~ is brought forward by Mr. King, as being of itself a strong reason for ~~ing~~ in the construction of the proposed road. He points out the great ~~eriority~~ ~~eriority~~ we shall gain by the diminished cost of transportation, not only the markets of California, but in those of the whole Pacific; and he applies ~~e~~ the fundamental maxim in trade, that a diminution in the cost of transportation, is equivalent to a diminution in the cost of production.

But, without dwelling upon this, we pass now to the consideration of ~~ether~~ other novel and striking idea, as to the effect to be produced by this railroad upon the general commerce of the world, and of the manner in which ~~a~~ result is to be obtained. We shall let Mr. King speak for himself:—

'We have already spoken of the commanding position which Great Britain occupies in the commercial world, and we deem it proper to remark still further on ~~a~~ advantages she has derived from it. At an early day she adopted the warehousing system. This enabled her own merchants and those of all other countries to place merchandise in bond, for consumption or exportation. It has been ~~ally~~ beneficial to her commerce and manufactures.

'While it has exempted the merchants from paying duties on importations bonded actual consumption, it has enabled them to make up, with home manufactures and foreign commodities, assorted cargoes for all parts of the world. Foreigners have thus been induced to place immense amounts of merchandise in bond, that they might have the double advantage of consumption or re-exportation.

'The manufacturer has thus been enabled to allow the raw materials, necessary ~~his~~ in his pursuit, to remain in store until required for use, without being burdened ~~th~~ the payment of large sums in duties on importations not immediately wanted. ~~east~~ supply has thus been constantly held, at the expense of the foreign producer."

To support this view, tables prepared with evident care and labor are inserted in the body of the report, showing the quantities of a long list of articles of foreign growth and production, in the bonded warehouses of London, Liverpool, Bristol and Hull, on the 5th January, 1832 and 1833; and ~~a~~ quantities and official value of articles of foreign growth and production exported from, compared with the official value of the total imports into Great Britain, from 1831 to 1844.

"The great variety and amount of articles constantly on hand in the British warehouses, as shown in these tables, for domestic consumption—the supply of ~~r~~ commerce and manufactures—is truly surprising. It will be seen that more ~~an~~ ~~one-fifth~~ of all the imports are re-exported, and that if the whole amount of ~~ties~~ duties payable had been exacted, her merchants would have been required to pay ~~re~~ more than two hundred and eighteen millions of dollars on ~~five~~ articles alone, from ~~which~~ they were relieved by the warehousing system.

"The total value of articles imported into the United States in 1848, was \$4,977,876. The value of articles re-exported was \$7,986,806. Thus it will ~~seen~~ be seen that ~~we~~ re-export but a little more than ~~one-twentieth~~ of our imports, and ~~at~~ the re-exportations from Great Britain are nearly five times larger in proportion to her imports than ours, and are actually ~~nine~~ times larger than ours. Now,

if by the construction of the proposed work we give such a direction to the course of trade as to bring us almost in a central position between Europe and Asia, it seems impossible to resist the conclusion that our warehouses must become the great depots and our cities the marts of modern commerce."—(P. 14.)

We have not left ourselves any room to speak of the terms of our recent treaty with New Grenada, or of the bill accompanying Mr. King's report. We can only say of the former, that it amounts to a defensive league on our part, by which we virtually guarantee the sovereignty and independence of New Grenada for a period of twenty years; and of the latter, that it is prepared with great care and forethought, and provides that at least seven-eighths of the stock shall be owned by citizens of the United States.

The services to be rendered by the contractors in return for the pecuniary assistance received from the government, will exceed by many fold the amount it advances.

The rapid settlement of California, and the character and pursuits of its people, will soon render the efficient interposition of the government necessary, and the frequent transportation of agents, and of military stores, and men must inevitably take place.

We have also seen recently in the public prints a letter from Commodore Jones, commanding the squadron in the Pacific, in which he recommends to the Secretary of the Navy that our ships of war should be refitted in California, by which their long absence from a station where they constitute a most important and efficient police will be prevented, and the great delay and expense of the tedious voyages round Cape Horn and back be saved. This is so palpably a measure of economy and policy, that it cannot fail to receive the sanction of the department controlling the navy. And here we have at once, in the transportation of materials, stores, and persons required to establish a naval depot in California, and to relieve from time to time the officers and crews of our different ships of war, a mode by which the government will be fully reimbursed for its proposed expenditures.

But it must not be thought that it at all enters into the views of Mr. King, that this mode of communication with California is to dispense with the future construction of a railroad from the valley of the Mississippi to the borders of the Pacific Ocean.

This road, which is equally demanded by public opinion and public policy, must sooner or later be made. We rejoice to see that the mind of the nation is already so fixed upon it, that the commencement of this great undertaking may be regarded as not very distant. And much, we conceive, will depend upon the manner and direction in which it is begun. It should, as a matter of obvious policy, take such a course as to pass through lands the best adapted for immediate settlement, either by their fertility or their mineral wealth; and then it will accomplish more rapidly the universal effect of railroads, to create population along their line.

If it be begun at both extremities of the line simultaneously, and this rule of direction be followed, the public lands through which it passes will be brought into market under very profitable conditions, and their sale from year to year will very soon be sufficient to meet the expenses of the year in construction. And this rapid settlement will also in time give rise to the by-travel, which is found, even on the main routes, in the old States, to be indispensable to the support of railroads, in the expensive and handsome style in which they are maintained, at least at the North.

We have dismissed all anxiety as to the accomplishment of this great un-

dertaking, and now our thoughts are turned chiefly to the examination of the various plans offered to the public, concerning which we may have something more to say hereafter.

There is one effect following the completion of this railroad across the isthmus, (or any other mode of easy communication between the two oceans,) that is too striking to be omitted. Since the earliest application of steam to navigation, the question has often been discussed, as to how far this motive power would be eventually employed for the general purposes of commerce, to the exclusion of sails; and it has hitherto appeared to be requisite that science should bestow upon the arts some new method of generating heat more economical and compact than the present one, before steam could be generally introduced on the ocean. A long time elapsed before the English steamers ventured across the Atlantic, notwithstanding the experience gained by their sea-practice on their own shores, and on the coasts of Europe. Yet it must be remembered that the English, having no great inland water communications like ourselves, were compelled by their position, if they built steamers at all, to build sea steamers, and to this fact, and this only, it is owing, that they have taken precedence of us in the construction and management of sea steamers—a precedence which, we may incidentally observe, we shall soon be prepared to dispute, to which it does not become the maritime genius of our people to submit, and the loss of which is only delayed, not prevented, by a few failures in the beginning, such as might be reasonably looked for in new enterprises, particularly among an inventive people not disposed to copy tamely after others.

With all the improvements in machinery, and economy in the use of fuel, which have so astonishingly marked the progress of steam navigation, its common routes are still limited. It is only for distances not exceeding a certain extent, that steam can be advantageously employed.

The use of steamers between the great marts of commerce on both sides of the North Atlantic, and those in the North and South Pacifics, if thought of, has not yet been projected. But the direct and immediate effect of the construction of the proposed road is to bring these markets within reach of each other by means of steam navigation. We are well aware that, for many reasons, it is neither desirable nor possible that the ordinary channels of trade should be too suddenly closed or altered.

The vital circulations of commerce are not to be rudely or unadvisedly interrupted. But in this instance, the effect is to create new channels without destroying the old ones—to open new avenues to enterprise and wealth, and to supply new means of providing for those unforeseen necessities and wants which have sprung from the recent discoveries in California.

It is by such views and reflections as are here presented, that we have been led to regard the construction of the proposed and long thought of railroad as a pregnant event in the history of commerce. It is hardly necessary to declare that we do not speak of this road as the only, or even the best, mode of transit between the two oceans: With respect to others, as, for example, that across the Isthmus of Tehuantepec, we wait to have the deliberate opinions of engineers concerning the feasibility of the excavations, &c., of hydrographers concerning the capacity, safety, and facilities of approach, of the harbors on each side; and we should also be glad to learn the opinion of geologists concerning the alluvial formation of these shores, and the laws of deposit under which it takes place—for it would be a serious objection to

such a gigantic undertaking that it must begin by a contest with the operation of the fundamental laws of nature.

At the same time that we are prepared to treat this, and all similar projects without prejudice, and to discuss their merits fairly, we see in the one, of the railroad across the isthmus, the only present practicable plan, the only one that can be commenced without delay, the merits and defects of which have been long known and thoroughly examined, and the only one in which capitalists are willing, with sufficient encouragement, to embark immediately.

As there is no subject more important than this, (of constructive communication between the two great oceans,) or more intimately connected with the purposes for which this journal was established, we shall endeavor, from time to time, to keep our readers acquainted with the progress of opinion, and of events in relation to it.

ART. IV.—COMMERCIAL CITIES AND TOWNS OF THE UNITED STATES.

NUMBER XY.

DETROIT, MICHIGAN.*

ITS LOCATION ON THE DETROIT RIVER, AND DESCRIPTION OF THE RIVER—THE DEPTH, WIDTH, CURRENT, AND NAVIGATION OF THE RIVER, AND A COMPARISON OF ITS RISE AND FALL WITH THE FLOODS IN SOME OTHER LARGE RIVERS—SETTLEMENT OF DETROIT, AND NUMBER OF ITS INHABITANTS AT DIFFERENT PERIODS—ITS RAILROADS, AND FACILITIES FOR COMMERCE—ITS STORES, DWELLING-HOUSES, HYDRAULIC WORKS, CHURCHES AND PUBLIC BUILDINGS, AND THE GREAT NATURAL CURVEITY PRESENTED BY THE UNITED STATES BUILDING—MANUFACTURES OF LUMBER—SHIP-BUILDING—FOUNDRIES—MACHINE-SHOPS, ETC., ETC., AND ITS ADVANTAGES AND FACILITIES FOR MANUFACTURING BY STEAM.

THE city of Detroit is pleasantly situated on the north-westerly side of the Detroit River, or Strait, extending along the river more than a mile and a half, the centre of it being about seven miles from Lake St. Clair, and eighteen miles from Lake Erie, in north latitude $42^{\circ} 20'$, and west longitude from Washington city $5^{\circ} 56'$. The river runs from Lake St. Clair, to a point about two miles below the city, in a direction about 30° south of west, and from thence it runs nearly south to Lake Erie. The original bed of the river opposite Detroit, and for a mile above, and about three miles below, varied from about 48 to 52 chains in width, averaging about five-eighths of a mile; the width from the docks of Detroit to the opposite docks of Sandwich being about half a mile. Lieutenant M'Comb, of the United States Army, carefully sounded and surveyed the river in the summer of 1841, and measured its depth and current in numerous places, and at different times. The depth between the docks in June, 1841, varied from about twelve to

* The following article was prepared for the Merchants' Magazine by EZRA C. SEAMAN, Esq., a member of the Detroit Bar, and the author of an elaborate work entitled "Essays on the Progress of Nations in Productive Industry, Civilization, Population, and Wealth; illustrated by Statistics of Mining, Agriculture, Manufactures, Commerce, Banking, Revenues, Internal Improvements, Emigration, Mortality, and Population." This work is embraced in a volume of some six hundred octavo pages, and contains a vast amount of important information, forming altogether one of the most valuable contributions that has yet been made to the literature and statistics of political economy. We should not, perhaps, agree in all the inferences and conclusions of the author, but his work is highly suggestive, and exceedingly valuable as a book of reference.—*Ed. Merchants' Magazine.*

forty-eight feet, averaging about thirty-two feet. The descent from Lake St. Clair to Lake Erie is about six feet, or three inches per mile. The velocity of the current in the deepest part of the channel, opposite the city, he found to be about two and a quarter miles per hour; three miles below the city, where the river is a little contracted, he found it to be two and a half miles per hour; and some miles lower down, where it is considerably wider, he found it to be only one and five-eighths miles per hour.

There is not a ripple in the whole length of the river, and its current is nearly uniform. It rises and falls with the surface of the water of the great chain of lakes, of which it is a connecting link; and being less affected by the winds, it is still more uniform in its height and surface than the lakes are. The average annual rise and fall is only about two feet; the water gradually rising from the latter part of March or first of April, until the first of July, and falling from some time in August, until February; being generally two feet lower in February than it is in July. A succession of two or three wet seasons raises the surface of the water in all the lakes, and the straits connecting them; and on the contrary, a succession of dry and warm seasons causes a fall of the water; making a difference in a series of years, at the same time of the year, of about four feet, and a total difference of about six feet, between the month of February, 1819, when it was the lowest, and the month of July, 1838, when, on account of its destruction of timber in many situations, it was supposed to have been higher than it had been before in many centuries.

The Detroit river is a deep and smoothly flowing stream; the most uniform and perfect, for purposes of navigation, and one of the most beautiful which the eye of man ever beheld. A strong south-west wind on Lake Erie, lasting from two to three days, will sometimes depress the water in the west end of the lake from three to four feet, and at the same time heap it up at the foot of the lake, and flood the whole lower part of the city of Buffalo, and yet not affect the water in the river at the city of Detroit over eighteen inches. Such gales occur every few years, often driving the shipping up into the streets of the city of Buffalo, and destroying large amounts of property, while vessels are lying at the docks in Detroit undisturbed, and in perfect security.

The stream is so deep, and its current so strong and uniform, that it keeps itself clear; and its navigation is not affected, as the Mississippi is, with either rocks, sandbars, trees, or sawyers. Its deep and strong current also carries along the ice with a slow and uniform motion, so that it is never dammed up by the ice; while the St. Lawrence, at Montreal, is shallow and full of rocks, against which the ice lodges, and often forms a dam across the river, and raises the water from twenty to twenty-five feet, overflowing its low banks for miles, and sweeping off and destroying large amounts of property.

The reader can judge of the superiority of its navigation over almost all other rivers, and the greater security of property on its banks, when he reflects on the following facts. The average annual variation of the height of the Detroit river does not exceed two feet, and the greatest variation from its lowest to its highest stage, during the last half century, is only about six feet. On the contrary, the annual variation from low to high water mark of the Ohio river, from Cincinnati to its mouth, is about fifty feet, and its extreme range on record, sixty-three feet. The water was the highest at the time of the great flood, in 1832; but rose about sixty feet at Cincinnati, in December, 1847, and fifty feet in the Cumberland river, at Nashville. The

annual floods of the Mississippi river, above low water mark, from the mouth of the Missouri to the Ohio, are said to be about twenty-five feet ; and for hundreds of miles below the mouth of the Ohio, they are about fifty feet. Above Natchez the floods decline, and at Baton Rouge they seldom exceed thirty feet, and at New Orleans twelve feet ; and yet, from the mouth of the Ohio to the St. Francis river, below Memphis, there are various shoal places in the Mississippi, where, at low water, pilots are often perplexed to find a sufficient depth of water ; and the Ohio, in the fall of 1838, was so low for several months, as to render its navigation above Louisville of but little value.

The annual floods of the Nile are from June to the middle of August, when they usually reach the maximum height of from twenty-four to twenty-eight feet above low water mark ; and nearly the whole Delta, and the long valley of Egypt, is covered with water. The waters of the Ganges commence rising in April, and continue until the middle of August, when they usually attain a maximum height of about thirty-one or thirty-two feet. The floods of all these rivers, and in fact of nearly all the great rivers in the world, sometimes do great damage, and at others they are so low as to render their navigation more or less imperfect. The navigation of the beautiful Hudson is sometimes imperfect, even below as well as above Albany ; while the floods at that city sometimes destroy large amounts of property.

It is not so, however, with the Detroit river. It has no floods—it never overflows its banks—property on its banks is always secure, and its navigation is always perfect, except when frozen over, or full of floating ice. At all other times the navigation on the Canadian side of the river is always perfect. Near the mouth, a reef of limestone rocks extends from the Michigan shore, across the western branch of the river, to Grosbe Isle, and from thence, across the widest or middle channel, to Bois Blanc, a Canadian island, opposite Amherstburgh and Fort Malden. The only channel at present deep enough for the largest, or even the middling class of vessels, is between Bois Blanc and the Canadian shore. All American vessels are thus compelled to pass directly under the guns of the British Fort Malden, which, in case of war with Great Britain, would be a serious inconvenience to our commerce, and might endanger the safety of the country. At the beginning of the war of 1812, an American vessel with supplies for the garrison at Detroit, was captured before Fort Malden, which finally led, in its consequences, to the fall and surrender of Detroit, and the temporary conquest, by the British, of the whole upper lake country. Inasmuch as a comparatively few thousand dollars would make a good ship channel through the rocks on the American side of the river, the government ought not to hesitate a moment in doing it, for the position of our commerce and the safety of the country.

The two principal streets of Detroit are Jefferson Avenue and Woodward Avenue, each one hundred and twenty feet wide ; the former being upon a ridge, elevated about twenty feet above high water mark in the river, and running nearly parallel with, and from four hundred to one thousand feet distant from the river ; and the latter crossing the former at right angles, at the centre of the business part of the city. There was formerly a little run or brook, of mere surface water, a few hundred feet back of Jefferson Avenue, which fell into the river near the lower end of the city. In this run the ground is from five to ten feet below the average level of Jefferson Avenue, and beyond it the ground gradually rises with great regularity, and is from twenty-five to thirty-five feet above the river, in the most of the rear part of the city. There is a large sewer laid down in the bed of this run or

brook, known as the grand sewer, which serves to drain the water from a large proportion of the city. With the exception of the little depression at the grand sewer, the ground rises very gradually from the wharves to the rear of the city, and the ascent up to Jefferson Avenue is sufficient to give a fine view from the river of the whole of the lower part of the town; and perhaps two-thirds of the city can be seen at one view, from the centre of the river.

Though the Detroit river was visited by the French as early as 1610, yet the first permanent settlement, where the city of Detroit now stands, was made about the year 1701. The population of the city of Detroit, and of the Territory, now State of Michigan, at different periods, was as follows:—

Population in	City of Detroit.	State of Michigan.	Population in	City of Detroit.	State of Michigan.
1810.....	770	4,762	1834.....	4,968	87,263
1820.....	1,442	8,896	1840.....	9,192	212,267
1830.....	2,222	31,639	1845.....	13,065	304,278

The population of Detroit did not increase much, if any, from the year 1838 to the spring of the year 1843, but since that time, it has increased very rapidly, and is supposed now to exceed 18,000. Detroit is the concentrating point of the commerce and banking of the whole State; in fact, there are no banks in the State except in Detroit. More than two-thirds of the exports from the State are from Detroit, and over three-fourths of the imports into the State are into the single port of Detroit. By means of the increase of its manufactures, and the expansion of its commerce, we may expect the population of Detroit to increase relatively, more rapidly in future than that of the State; and that it will amount, at the census of 1850, to from 20,000 to 21,000.

All the great leading roads made by the United States in Michigan while it was a territory, commence at Detroit, and diverge from thence in diverse directions across the State. The Pontiac Railroad, running from Detroit twenty-five miles north-westerly to the village of Pontiac, together with the navigation on the river and Lake St. Clair, brings the principal part of the products of all the northern part of the State directly to Detroit for a market. The Michigan Central Railroad, running westerly from Detroit, brings to that city nearly all the business of the central portions of the State; and when it shall have been completed to Lake Michigan, a few months hence, it will secure to the city nearly all the trade and forwarding business of the western part of the peninsula. It has been in use some years to Kalamazoo, a distance of about 145 miles, and was opened last fall to Niles, on the St. Joseph river, 191 miles from Detroit. It will be opened early next summer to Lake Michigan, which is about 29 miles from Niles, making its whole length, when finished, about 220 miles. The distance from its termination at New Buffalo across Lake Michigan to Chicago, is about sixty miles, making the whole distance from Detroit to Chicago but 280 miles; the distance around the lakes being about 750 miles. In a few years we may expect a railroad to be made from New Buffalo, around the head of the lake, to Chicago, and from thence to the Mississippi river, at Galena, thus completing the iron chain of communication between Detroit and the Mississippi river.

All the east end of this road for more than fifty miles, and also the westerly part recently completed, is laid with a heavy T rail, weighing over 60 pounds to the yard; and the company is sparing no pains, and no reasonable expense, to make this a substantial and permanent work. The company

is authorized to build and own not more than six steamboats, to run in connection with the road, on Lakes Erie and Michigan; and the enterprising engineer of the road (Mr. Brooks) is now building a steamer for the company, and making arrangements with the owners of other steamers, to form two daily lines each way between Buffalo and Chicago, so as to leave each place in the morning and evening of each day, and carry passengers through a distance of about 600 miles, in less than 48 hours; though the passage around the lakes is over 1,100 miles, and usually occupies from four to five days.

The Company have purchased about seventeen acres of land in the lower part of the city, (nearly all of which once formed a part of the bed of the river,) with a water front of nineteen hundred feet. All this has been filled in at great expense, and many large buildings erected upon it, on piles. The great freight depot, the largest perhaps in the world, is 100 feet wide, and extends along the river 800 feet, with a wharf in front of it 40 feet wide; the water at the dock varying from 12 to 22 feet in depth. The company have two other warehouses near by, one 50 by 90 feet, and the other 40 by 90 feet. They have also built a round engine house, 130 feet diameter; a machine shop, three stories high, 60 by 95 feet, with two wings, two stories high, one of them 40 by 60 feet, and the other 40 by 55 feet; a car shop, three stories high, 55 by 169 feet; and a large passenger depot, 75 by 303 feet, with fire proof offices in front, 22 by 75 feet, making the whole building 75 feet wide and 325 feet long. Vessels lying at the wharf can load and unload directly from the warehouses, without any cartage; and every facility exists for doing an immense business, in the cheapest manner, and with the greatest despatch possible.

The whole cost of the road is estimated by the engineer at...	\$4,820,000
Engines, cars, and other stock on the road.....	450,000
One steamboat and furniture.....	130,000
Total.....	\$5,400,000

The reader will see at once the great facilities and advantages of the city of Detroit for purposes of commerce and navigation, and the immense importance to it, as well as to the State, of the Michigan Central Railroad. In addition to the depot and warehouses belonging to the railroad, there are on the wharfs of the city nineteen warehouses, the most of them large, and from two to four stories high.

In addition to a large retail trade, there is a pretty heavy wholesale business done in Detroit; and the amount of it is annually increasing, with great rapidity. Nearly all the merchants in the interior of the State depend on occasionally replenishing their stocks in Detroit, and a large proportion of them buy all their goods here. The exports, imports, navigation and tonnage of the city of Detroit, as well as of the other ports of the State of Michigan, have been stated so fully and in detail in a recent number of this review, (for July, 1848,) that it is unnecessary to repeat the details of them here. The reader is referred to that article for more complete information on those subjects.

The most of the stores are substantial brick buildings, there being several very fine blocks of three and four story brick stores; which, together with the warehouses, many good dwelling-houses, churches, and other public buildings, give the town rather an imposing appearance from the river, or from the opposite shore at Windsor. Though there are many good dwelling-houses in the city, which cost from \$4,000 to \$8,000 over and above the lots

on which they are erected, yet there is none which cost, or if built at present prices of labor and materials, would have cost above the latter sum. Though Gen. Cass is a man of great wealth for this country, and lives in a large house, yet it is a plain wooden building, and he has set an example of economy and of commendable simplicity to the whole West, as well as to his neighbors, which is well adapted to the condition of a new country.

WATER. The city is supplied with water from the Detroit river, by means of a hydraulic establishment in the upper part of the city. The reservoir which contains the water is of cast iron, 60 feet diameter and 20 feet deep, secured by strong iron bolts and rivets; supported by a circular brick building, 62 feet in diameter, at an elevation of 47 feet from its foundation. It is enclosed with a frame building, standing on the brick foundation, 65 feet diameter and 24 feet high, with a conical roof. The reservoir is supplied by means of a steam-engine, which works a forcing pump that is fixed several feet below the surface of the river, and is found fully adequate to furnish an abundant supply of good and wholesome water to the whole city. Connected with these works there are said to be about four miles of iron pipe, over ten miles of tamarack logs, and fifty hydrants or fire plugs, all of which cost the city about \$120,000.

CHURCHES. There are in Detroit sixteen churches: four Roman Catholic, two Episcopalian, one Presbyterian, one Scotch Presbyterian, one Congregational, three Methodist, two Baptist, one German Lutheran, and one Sailor's Bethel.

The new Catholic Cathedral, or St. Peter's Church, is a very large and substantial edifice, and being high, massive, and of good proportions, it has an imposing appearance. It is built of brick, and is 160 feet long and 81 feet wide. The corner-stone was laid June 29th, 1845, and it was consecrated June 29th, 1848. The steeple is not yet completed. The Cathedral of St. Anne, known as the French church, is 116 feet long by 60 feet wide. The first Presbyterian church is a good, substantial, and well appearing brick edifice, with a portico and colonade in front. Its length, including the portico, is 100 feet, and its breadth 60 feet.

Though the Catholics have numerically but one-fourth part of the churches of the city, yet the Catholic population really constitute about two-fifths of all the inhabitants. In addition to these churches there are three or four religious societies, which meet in other public buildings.

PUBLIC BUILDINGS. The public buildings consist of the old State House, the United States building, the State building for the Supreme Court and public offices, the County Court House, the County Jail, the City Hall and Market, and the Firemen's Hall.

The United States building is a handsome edifice, standing on the corner of Jefferson Avenue and Griswold-street, near the centre of the city, having a front of 40 feet on the Avenue, and being 57 feet deep. The front and also the side on Griswold-street, is built of polished shell limestone, brought from the islands in Lake Erie. It was built by the Bank of Michigan for a banking house, in 1837, at an expense of about \$40,000, and is now occupied for a United States Court House, public offices, and post office. The architecture is in good taste, and though it is not large and massive enough to give it a very magnificent or imposing appearance, yet it is one of the finest buildings in America, and presents the greatest natural curiosity of any building on the continent, and perhaps the greatest of any in the world. The polished surface of the stone exhibits a great variety of petrified shells of divers

colors, shapes and sizes; but what is the most curious, it exhibits a perfect petrification of the cutral section of a human face, chin and skull, separated through the centre, from front to rear, in cutting the stone, showing the lines of the chin, mouth and nose, the socket of one eye, the whole outline of the transverse section of the cranium, and even some of the folds and the shape of the medullary substance of the brain. This is not only a great and striking curiosity in itself, but it excites in the mind curious speculations. How, and in what age of the earth's history, could such a petrification have been formed? The block in which it is exhibited is a large one, and it must have been cut out of the solid limestone rock; and yet it must have been formed since the earth was inhabited by human beings, of substantially the same organization, to all appearance, as the present race of man.

All the other public buildings enumerated are substantially built of brick, but present nothing in particular to attract the eye of the stranger.

MANUFACTURES. The largest manufactures in and about Detroit consist of sawing lumber and ship-building. There are in Detroit five large steam saw-mills, one of which was built during the last season. These mills sawed, during the year 1848, over 7,500,000 feet of lumber, and about 3,000,000 laths. They are situated directly on the river, and are mostly supplied with logs from the county of St. Clair, floated down the creeks and small rivers into the St. Clair river, and from thence to the city of Detroit. The laths are sawed from the best part of the slabs, and the sawdust, together with the refuse part of the slabs, supply the necessary fuel to work the steam-engines. These mills employed nearly ninety men on an average, and the lumber sawed during the year was worth about \$80,000. In addition to this, the lumber-yards in Detroit sold, during the year, over 5,000,000 feet of lumber, besides lath, which was sawed by mills on St. Clair river, in the county of St. Clair, at an average price of about \$10 per 1,000, the most of it being white pine; the aggregate sales of lumber at Detroit during the year being thus swelled to an amount exceeding \$130,000.

Ship and boat-building is also a very large and important branch of business.

There are also three pretty large foundries, with machine shops connected with them, employing on an average about 140 men, which cast steam-engines, mill-irons, machinery of various kinds, stoves, ploughs, &c., and consumed during the past year about 1,200 tons of pig and bar iron, and whose products were worth about \$115,000.

There are also two boiler factories, for the manufacture of boilers for steam-engines, and several machine-shops for working in iron, and some in brass. There is also one sash factory, two pail factories, one steam flouring mill, two tanneries, and five breweries. Cabinet making and most other mechanical employments are pursued in Detroit to a considerable extent, and something is done also at shoemaking; but much the largest proportion of the shoes and boots worn in Michigan are made in Massachusetts, and much of the cabinet-ware and coarse clothing is made in the State and city of New York.

The country back of the city of Detroit ascends from the river, with almost perfect regularity, at the rate of from four to five feet per mile, for a distance of from twenty to twenty-five miles. Though it inclines sufficiently to carry off the water rapidly when cleared, and the water courses are opened, yet it appears to the eye in most places like a perfect level, and in a wild state the water does not run off very freely. It is, in fact, a wet, heavily timbered country, and the wood and timber is cut off very slowly; so that, by means

of the navigable waters up and down the stream, the two railroads, now in operation, and two or three plank roads soon to be built, we may expect a large supply of fuel for the city, and also for purposes of navigation and manufacturing by steam at pretty cheap rates, for a long period to come. This State is now producing a considerable quantity of wool for exportation, and the crop of wool is increasing annually. The connection of the lakes by means of canals with the Ohio and Mississippi rivers, will enable manufacturers in this city to procure cotton from Tennessee, Arkansas, Mississippi and Louisiana, cheaper than it can be sent to the factories of Massachusetts, so that there seems to be no good reason why both cotton and wool may not be manufactured in Detroit by steam power, as advantageously as they are in Massachusetts and Pennsylvania.

The upper peninsula of Michigan, lying on Lake Superior, is supposed to contain inexhaustible mines of iron as well as of copper, lying on and near the lake shore, and an abundance of wood to smelt the ore. If the incoming administration of General Taylor shall protect the industry of the country, as we have reason to expect, we may reasonably anticipate, that within the next twenty years the mines of iron on Lake Superior will be extensively worked, and large quantities of ore smelted and made into pig iron; that it will be brought to Detroit to be rolled into bar and sheet iron, and cut into nails; and that there will be located in Detroit numerous rolling mills, nail factories, &c., for the manufacture of iron, making it one of the great iron cities of the United States, and perhaps inferior only to the city of Pittsburgh. Its facilities for navigation and commerce, as well as for manufacturing by steam, may also make it a place of importance for the manufacture of both cotton and wool, and thus make it the great workshop as well as central mart for the lake country.

E. C. S.

ART. V.—SICILY AND ITS COMMERCE.

No nation in the world has been more glorious, more prosperous, more civilized, than the Sicilian; but at the same time no nation has lived till the late revolution in deeper misery. Everybody is acquainted with the events of 1837, when Sicily made an abortive attempt to shake off the power of her tyrants. Almost 150 heads were put at a price, and the courts martial condemned to death fifty-eight of her best citizens for political offences. The infamous Del Caretto, worthy minister of the King of Naples, presided at the butchery of his own countrymen. When eight citizens of Catania were condemned to be shot, he caused them to be executed while a military band struck up joyful tones, and the same evening he gave a grand ball at the communal palace. Among the seventeen that were murdered at Misilmori, was a lad fourteen years of age; and among those condemned to the mines, a young woman, whose only guilt was to have tolled the alarm bell in a village. Posterity will scarcely believe these atrocities, and yet they have been perpetrated in Europe, and in the year 1837! This, however, was not the first time that Sicily had been flooded in blood. In 1825, while the Austrians were stationed in the city of Palermo, a conspiracy was formed to exterminate all foreigners; the conspiracy was discovered, and thirteen of the conspirators were put to death, while a large number were exiled or thrown

into a dungeon. In 1831, another conspiracy was discovered, and eleven persons more were shot. Under such auspices commenced the infamous reign of the infamous Ferdinand II.! Would that I could mention the names of all the martyrs that Sicily gave to Italian liberty, from 1825 to 1837; but history will record their glorious names in indelible characters, and their precious blood has already been productive of liberty to their country.

Sicily could not have forgotten her ancient glory, her secular liberties, and the free institutions which she possessed long before the rest of Europe. I speak of the constitution given to her by the Normans, those same Normans who were the oppressors of England;—a very liberal constitution for those times, rendered still more so by Frederick II. of Treve, and by the Sicilian aristocracy in 1812, which in one night destroyed all feudal privileges. This constitution was destroyed in 1816, by Ferdinand I. When adversity hung over the house of Bourbon, Ferdinand's principal reliance was on the Sicilians, who lavished their blood and money to fight his enemies, and the hypocritical king did everything to conciliate their affection; but as soon as fortune began to smile again on his house, and he found himself strong enough to dispense with their assistance, he took from them not only the constitution of 1812, but that also of the Normans, which had been enlarged by the Treves, and respected by the French and Arragonians, and all the foreigners who had severally ruled over the island. But to Sicily, as well as to the rest of Italy, something better was reserved than the Norman constitution. The hour of Sicilian independence has struck; that rich and glorious island has returned to her ancient glory. The beginning of 1848 was marked by the last Sicilian revolution. It was understood that the king's birth-day would be chosen for the rising of the whole island, and on the morning of the 12th of February, while the guns of the fortress of Palermo announced the festival day of the tyrant, the populace of Palermo attacked and disarmed the soldiers. Monks and priests formed a formidable legion, crosses and swords in hand, to oppose the satellites of the Neapolitan king. The insurgents respected private property, and even the Royal Bank, and treated with kindness and mercy the prisoners and wounded; while the bloody generals of Ferdinand ordered their troops to be merciless, to butcher the people without regard to age or sex, and to make a slaughter-house even of the sanctuary of God. The Sicilians determined not to yield till the last drop of blood was shed. They fought bravely for many days, suffering all the horrors of a bombardment. The people of the country, six thousand strong, decided the fate of the revolution, and the cruel Neapolitan generals were forced to fly, leaving behind them one of the finest cities of Europe reduced almost to a heap of ashes. Next came the insurrection of Messina, and the strong city of Syracuse, the native place of Archimedes. Both these cities fell into the hands of the insurgents. Then the king tried to bring the island back to his allegiance by granting a constitution and making some cabinet changes. But *it was too late!* The Sicilians had determined to assume their independence, and not to be trifled with any more by a traitor and a tyrant. They immediately formed the national guard, and elected a provisional government to take the necessary measures to secure the liberty of the country and oppose the oppressors. Ruggiero Lettino, one of the most patriotic and wise men of Sicily, was unanimously chosen as the head of the government. Envoys were sent to foreign countries in order to have their independence acknowledged; and though at first it was determined to form a separate republic, it was thought

iser to have a constitutional king. In less than four months, these heroic landers had so far prospered in their internal affairs, that they were able to send help to their brethren of Naples, and have already formed a strong fleet and army to assist the insurrection of the Calabrias and Naples. France and England were the first to acknowledge the Sicilian independence. Sicily, though a separate State, continues to form part of the Italian league, and has contributed men and arms for the war of the Lombard independence.

Sicily is the largest island in the Mediterranean, situated between Italy and Africa, and had formed till the last revolution part of the kingdom of the two Sicilies. It contains two millions of inhabitants. After the fall of the Roman empire, this beautiful island was successively occupied by the Saracens, Normans, and French. The so-called Sicilian vespers marked the tragic end of the domination of the last, and the island passed under the dependence of the crown of Arragon, and finally under that of the king of Naples. The 12th of February, 1848, she asserted her independence, and is now governed by a national assembly and a provisional executive.

Sicily, after 1815, was divided in seven provinces; namely, Caltanissetta, Catania, Girgente, Messina, Palermo, Syracuse, and Trapani. The celebrated volcano, *Ætna*, rises 1672 feet above the level of the sea. The principal rivers of the island are the *Grande*, the *Salto*, and the *Giarretta*. The beauty of its climate and the fertility of its soil has rendered Sicily celebrated in every age. The principal articles of exportation are oranges, lemons, sunnatch, olive oil, wine, manna, raw silks, tissues of Messina, almonds, flax oil and seed, soda ashes, rags, liquorice, sulphur, essences of bergamotte, lemon, and Portugal, grains, tartar, dried raisins, gum, nuts, scagliola, pumice stone, hides, nut gall, mustard seed, cantharides, glue, tallow, starch, citron, branties, worsted Brancavilla, orchard grass, carobs, anchovies, fish oil, dried and salt fish, &c. The sumach and soda harvest is generally ready in August; the first exportations of oranges and lemons take place generally about the beginning of November; sulphur, oil, wine, salt, and rags, can be exported all the year round. Purchases of produce are always effected for cash, namely, one-half at the conclusion of the bargain, the other half on delivery of the goods. The principal importations consist in West India produce of every description, indigo, dyeing woods, spices, metals, hides, cod fish, paper, lumber, tissues of all kinds, English, French, German, Belgian, and Swiss.

GRAIN. The exports of this article, once very extensive, has been lately very much reduced, and are not allowed without the permission of a special administration, (*real patrimonio*.) The gross amount is estimated at 90,900 bags, almost all destined to Naples.

WINES. Sicily abounds with vineyards, particularly the southern part. Its yearly exportation to foreign countries amounts on an average to 50,000 pipes; that of brandies, spirits, and vinegar, to 15,000. Marsalla, one of the wealthiest cities of Sicily, is indebted for her prosperity to the immense cultivation of vines, the yearly produce of which amounts to 20,000 pipes.

OLIVE OIL. The yearly produce of oil is estimated at 20,000,000 pounds, 1,200,000 of which alone are exported.

LEMONS AND ORANGES, &c. The lemons, oranges, &c., of Sicily are preferred to those of any other southern province of Europe. From Messina and Palermo are exported yearly 300,000 boxes of lemons, oranges, citrons, bergamottes, *chinottes*, &c., to France, England, United States, Genoa, Trieste, and the northern part of Europe. Almost 12,000 barrels of lemon juice are exported every year from Messina and Syracuse, principally to Trieste.

MANNA. Sicily supplies the largest part of this precious article to Europe and America. Palermo exports not less than 4,000 boxes every year.

SUMACH. It is calculated that the cultivation of this plant has increased threefold within the last twenty years, and its exportation exceeds already 129,000 pounds.

COTTON. The soil and climate of Sicily are very favorable to the growth of cotton, though as yet the yearly production does not exceed 6 or 8000 bales, which is mostly consumed in the island and Naples, with the exception of a small quantity that is shipped to England.

DRY FRUITS. The exports of almonds, small nuts, pistach nuts, nuts, plums, and grapes, are estimated at 60,000 pounds, of which that of grapes alone amounts to 18,000 pounds.

FLAX SEED. Sicily exports every year about 38,000 pounds of this article to Genoa, Marseilles, Trieste, and England.

LIQUORICE. About 65,000 pounds of this root are shipped every year, besides 18,000 of its juice.

SILK. The exportation of silk is estimated on an average at 300 bales, or 90,000 pounds, of 32 ottogramma, principally from Messina, to the United States, England, Genoa, Trieste, and Marseilles.

CANTHARIDES. About 50,000 pounds of the precious insect are exported every year to foreign countries.

SULPHUR. This article is the principal mineral wealth of the island. Its exports amounted in 1846 to 750,000 kilograms.

SALT. The salt pits of Trapani and Agosta supply the large quantity consumed in the State, and export 350,000 kilograms to Malta, Civita Vecchia, Venice, Constantinople, &c.

FISHERIES. This branch of industry is very lucrative in Sicily. That of the tunny, anchovies, and sardines is carried on with great success. Besides the enormous quantity consumed in the country, 12,000 barrels are exported every year to Malta and other parts of Italy.

MANUFACTURES. It cannot be said that the Sicilians are very proficient in the manufacturing arts. They are in a great measure dependent upon the other provinces of terra firma, and other industrious nations of Europe. Sicily is not possessed with that spirit of association, which, by concentrating small capitals, constitute the great means of the manufacturing industry. She wants that mutual confidence which approaches the wealth of the proprietor and the capitalist to the talents of industrious and business men; she has no machineries, no instruments, good dyers, and capable manufacturers. There are, however, a few silk manufactories in Catania. There have been lately established at Palermo, Catania and Messina, some of cotton tissues, one of cloth, and a large cotton spinning wheel at Palermo; besides some factories of soap, nitre, glass, and cream of tartar, which yield as yet no considerable profits. In 1844 were imported into Sicily goods to the amount of 1,754,213 ounces, and exported 3,374,645. The amount of duties collected by the custom-house was 533,116 ounces. Contraband trade is carried on to a great extent in Sicily. It is calculated that one-third of the foreign merchandise introduced into the island does not pass through the custom-house. During the year 1846, there entered the different ports of Sicily the following number of vessels:—2,729 of 182,162 tons, at Palermo; 3,078 of 259,349 tons, at Messina; 631 of 78,949 tons, at Trapani; 54 of 7,427 tons, at Agosta; 689 of 21,390 tons, at Catania; 655 of 29,358 tons, at Melazzo; 282 of 23,164 tons, at

lo; and 641 of 23,348 tons, at Marsalla. Among them the foreign s were principally French, English, Sardinian, Austrian, and American.

IMPORTATIONS.		EXPORTATIONS.	
nd steel.....	ounces 78,066	Lemons, oranges, &c.....	ounces 216,819
rought.....	27,642	Brandy and liquors.....	112,788
ware.....	39,638	Soda.....	71,846
.....	81,292	Cheese.....	11,574
.....	20,061	Liquorice.....	33,374
.....	81,325	Grain and legumes.....	52,352
er.....	99,024	Manna.....	137,052
idea.....	143,096	Olive oil.....	177,493
nd salt fish.....	34,908	Hides, tanned, &c.....	9,710
1 tissues.....	557,528	Salt.....	59,901
".....	43,508	Sumach.....	183,819
am ".....	301,703	Lemon juice.....	31,639
".....	32,845	Rags.....	31,128
".....	36,021	Wines, vinegar, &c.....	883,801
		Sulphur.....	888,126

Palermo, the capital of Sicily, is a beautiful city, and contains a population of 100,000 inhabitants. Palermo is situated on the south-west coast of the island, on a lovely plain. The port is formed by a long and convenient mole, the construction of which has cost 25,000,000 francs, (\$5,000,000.) Besides the spacious and safe port there is a *Darsina*, or inward port, reserved for the use of the royal arsenal. The two grandest streets of Palermo are the *Cassara* and *Via Nuova*, cutting the city through at right angles, forming a cross. All the other streets run into either of these two. Palermo has magnificent palaces and very rich churches, adorned with marble of the best quality. All the houses have iron balconies. The finest public walk of Palermo is that on the sea-shore, called *La Banchetta*, which extends as far as the Botanic garden, (*La Flora*.) There are not wanting in Palermo literary institutions, though the lower classes are ignorant and superstitious. The Sicilian nobility make great display. Nothing is more imposing than an evening walk on the sea-shore; the number and richness of the equipages, the immense crowd of elegant horsemen and foot walkers, render the scene one of unusual splendor. The commerce of Palermo is very considerable, and in this respect transacted the most part of the contracts for the produce of the island. In the absence of an Exchange, business is generally transacted under the shelter of *Via del Cassaro*, where the merchants and brokers meet. Here, during the day, the crowd is so thick that it is almost impossible to cross the street. In 1843 the Royal Bank of the Two Sicilies was established, with the same powers as the Bank of Naples. From Palermo are exported the greatest quantity of the produce of the island; and into Palermo are imported West India sugar, manufactures, salt fish, and meats, iron, &c.

XL—DISTINCTION BETWEEN JURISPRUDENCE IN EQUITY AND IN LAW.

Equity, as distinguished from legal jurisprudence, is not generally understood, except by the profession, a page upon the subject will, I hope, be acceptable to your readers. And not only is it not understood by "the unlearned," but it involves a mass of learning which is with difficulty digested by the laborious student of the law. Equity, meaning equality, is the

acme of all law; but equity jurisprudence is distinct from legal enactments, or their interpretations. Its design is to supply the defect of law, whether it affords rules for the Chancellor of the Exchequer, a Roman prætor, or our modern Courts of Equity, or the equity side of the courts of law, as they are now formed in New York. But a confused understanding of this branch of jurisprudence has arisen, from the circumstance that courts of law have exercised certain plenary powers; and besides, the courts which were the proper channels for the complement of justice have not always afforded a remedy.

But to illustrate its object, I shall first give some examples of equity as applied in all law, and afterwards illustrate it as applied in jurisprudence. For instance, the legislator, in his enactments, omits to enumerate some topics which, if it had been convenient, or if it had not escaped his attention, he would have mentioned. Equity supplies the defect by including them under the same rule. Again, the legislator, by too general a clause, includes cases which he never had in his mind, and which he would have excepted, had they occurred to him. Equity makes the necessary exceptions. It limits too general clauses by making the necessary exceptions, and expands those too narrowly expressed, by including analagous cases under the same principles. And this equity, as distinguished from law, arises from the inability of human foresight to establish any rule, which, however salutary in general, is not, in some particular cases, but evidently unjust and oppressive, and operates beyond, or in opposition to, its intent.

This will serve for a description of general equity, though it will give no just idea of it as administered in former times, or at the present, in England or America. The language of Sir James Macintosh is thus:—Equity, in the acceptation in which the word is used in English jurisprudence, is no longer to be confounded with that moral equity which generally corrects the unjust operation of law, and with which it seems to have been synonymous in the days of Selden and Bacon. It is a part of laws, formed from usages and determinations, which sometimes differ from what is called Common Law in its subjects, but chiefly varies from it in its modes of proof, of trial, and of relief. It is a jurisdiction so irregularly formed, and often so little dependent upon general principles, that it can hardly be defined or made intelligible otherwise than by a minute enumeration of the matters cognizable by it. Justice Story remarks that there is much general truth in this statement; but objects that it is irregularly formed, or not dependent on general principles. But as there is a wide difference between the philosophy of law, as actually administered in any country, and that abstract doctrine which may, in matters of government, constitute in many modes the law of philosophy, the same principles will apply in matters of equity as regards its abstract principles, and its practice as carried out in Courts of Equity. If, then, the universal principles of equity is applied equally in courts of law as in Courts of Equity, and as equity jurisprudence differs more in the matters of which it takes cognizance, and also in the manner, than in any enlarging or contracting the literal interpretations of clauses, it would be best illustrated by enumerations; but as this would be too tedious, we must content ourselves with a general description.

Perhaps the most general, if not the most precise, description of a Court of Equity, in the English and American sense, is, in the words of Justice Story, that it has jurisdiction in cases of rights, recognized and protected by the municipal jurisprudence, where a plain, adequate, and complete remedy cannot be had in the courts of common law. The remedy must be plain;

for, if it be doubtful and obscure at law, equity will assert a jurisdiction. It must be adequate ; for, if at law, it falls short of what the party is entitled to, that founds a jurisdiction in equity. And it must be complete ; that is, it must attain the full end and justice of the case. It must reach the whole mischief, and secure the whole right of the party in a perfect manner, at the present time, and in future ; otherwise, equity will interfere, and give such relief and aid as the exigency of the particular case may require. The jurisdiction of a Court of Equity is, therefore, sometimes concurrent with the jurisdiction of a court of law ; it is sometimes exclusive of it, and it is sometimes auxiliary to it.

Fraud, accident, and trust, are proper objects of Courts of Equity, though they are not exclusively cognizable therein. And there are cases of each which neither courts of law, nor of equity, presume to relieve or mitigate ; and where the law has determined a matter, with all its circumstances, equity cannot intermeddle against the positive rules of law. And yet there are cases in which equity will control the legal title of an heir, general or special, when it would be deemed absolute at law. Thus, if an heir at law should, by parol, promise his father to pay his sisters' portions, if he would not direct timber to be felled to raise them ; although discharged at law, he would in equity be deemed liable to pay them, in the same way as if they had been charged on the land. And many cases of a like nature may be put.

And it has been objected that Courts of Equity sometimes refuse their aid, to the manifest hardship of individuals. But if they were bound by no precedents, a more tyrannical power could not well be imagined, and would deserve this spirited rebuke of Selden : " For law we have a measure, and know what to trust to. Equity is according to the conscience of him that is Chancellor, and as that is larger or narrower, so is equity. 'Tis all one, as if they should make the standard for the measure the Chancellor's foot. What an uncertain measure would this be ! One Chancellor has a long foot ; another, a short foot ; a third, an indifferent foot. It is the same with the Chancellor's conscience."

And again, if the Courts of Equity recognize the universal principles of equity, with little or no more freedom than the Courts of Law, it may be asked why they need to have their jurisdiction separate from the Courts of Law. The opinion of Lord Bacon favored the practice of the English courts, which assign separate jurisdiction. And the majority of the States of our Union have adopted the same plan, though in civil law countries, the general if not the universal practice is the other way ; whether more for the advancement of public justice, is a matter of doubt with many learned minds. But the courts of the State of New York, in its new code of procedure, adopted the practice of the civil law courts. And the question must remain a mixed question of public policy and private convenience, and never can be susceptible of any universal solution, applicable to all times, and all nations, and all changes in jurisprudence.

If the general reader is enabled to correct, in any measure, his mistaken notions of equity jurisprudence, or to form any conception of it from this single page, he may feel assured of the authority of the opinions herein advanced ; as the very learned Justice Story has been consulted in almost every sentence, and in every instance in which he has been consulted, he had drawn his knowledge from the highest authorities.

ART. VII.—THE PRESIDENT—SUB-TREASURY—TARIFF—SLAVERY.

WASHINGTON, February 27, 1862.

TO FREEMAN HUNT, Esq., *Editor of the Merchant's Magazine.*

MY DEAR SIR:—I have endeavored, with some considerable solicitude, to ascertain who are likely to compose the new cabinet; but, such has been the wise discretion of the President elect, that we hear nothing but vague rumors, as ephemeral as they are unreliable. It is admitted by all, even by the knowing, that thus far the General makes a good beginning, and this is appreciated as a satisfactory type of coming events, giving rise to a general opinion, that the gentlemen to be selected will represent important sectional interests, possessing, at the same time, the entire respect of their fellow-citizens, for the liberal and enlightened views they entertain, in relation to the national policy. There seems to be no suspicion that the President will allow himself to be trammelled, or embarrassed, through the influence of any mere party considerations, nor is it imagined he will admit or tolerate the least shadow of dictation, having determined to act on the conviction, that the most prudent course for him to pursue, with regard to his own reputation and convenience, will be to encourage and bring forward commanding talents, avoiding as much as possible, and consistently with good faith, those who have heretofore occupied prominent positions, as advocates of ultra doctrines. It is said to be his fixed purpose to protect his cabinet from the insidious influences of internal rival collisions. In order to guard the measures of the government from assuming any other than a national character, he should rest on the integrity and enlightened patriotism of Congress, entertaining no doubt that there will eventually exist the most perfect harmony between the legislative and executive branches of the government.

As these impressions gain strength and confidence, the best informed, especially those most anxious for the success and endurance of our institutions, seem to feel a sanguine hope that the financial and political prospects of the country will continue to improve, honestly believing, under the influence of certain well-advised practical modifications of the Sub-Treasury and the Tariff, that the former may be enabled to operate with greater freedom, and the latter prove as beneficial to the interests of the people and government, as it now is to the government alone, and through the influence of such modifications, secure a more perfect sentiment of union, harmony, and the conservative spirit of American nationality, than now exists.

To repeal either, or both these great national measures, could not fail to create a bitter renewal of the old party strife. Such indiscretion would immediately give rise to a question of principle, feigned or real, in which expediency and truthfulness are forgotten, surrendering place to passion and prejudice, through which the industrial portion of the population, the democratic masses, are most sure, ultimately, to suffer. The friends of the coming administration can have no motive to make any changes, beyond such as are absolutely necessary; such, in fact, as those who have lost favor would, but for a matter of pride, be most willing to concede, as essential ingredients to the perfection of their own measures. There is certainly no more important truth, in the every day experience of the world, than that constant vacillation in public and private affairs leads to inevitable mischief; and while acting with this knowledge, familiar to the humblest intellect, ought we not to anticipate that prudential considerations will dictate the adoption of a course of premonitory tolerance. If the whigs will submit themselves to be judged,

by the honest intelligence of the people, they will not only have the satisfaction to merit respect, but they will, by presenting such evidences of moderation and integrity, create in the public mind a high sense of propriety, which must and will exercise a future salutary controlling influence. They will then discover, what is very little understood, that while the American people often improvidently and illy bestow their confidence, there still preponderates the great preserving talisman of the nation—its universal good sense—the sober second thought. It is not an uncommon boastful remark, that we are above and entirely independent of foreign opinion; but with all due deference to such bigotry, I would respectfully suggest, as due to our national importance and moral influence, among the mighty political family, that we should cultivate a love of good fellowship, a longing desire to be distinguished for the most scrupulous probity, persevering consistency, and enlarged views of political economy. If such should be our prominent national sentiments, we shall have created a tribunal of public opinion, fully competent to test the relative value of theories, when compared with the established evidences of practical experience. If we may judge by the vicissitudes which attend our legislative councils, the rapid revolutions of political life, and the absolute disregard which has been exhibited for constitutional law and organization, we can easily foresee the prospective necessity for the introduction of some radical change in our legislation. To say that members of Congress do not hold themselves responsible to their constituents, or that they willingly neglect to perform their duties, would be to censure without reason, but, that the country has just cause to complain of the waste of valuable time, all will admit, which, when lost, estimated on the dogma of Grecian wisdom, is the most expensive extravagance.

To what end, and for what purpose, should we get rid of the Sub-Treasury? It has, thus far, with all its faults and trials, done its duty faithfully. The country has passed through an unexpected war, involving an immense expenditure of treasure, without wavering; and with similar soundness in the movements of our monetary affairs, we have with perfect regularity and calmness preserved ourselves through a period of great speculative excitement. In my judgment, had we been deprived of the controlling interference of this power, a wild scene of ruinous extravagance would have been exhibited, which, like the mania of 1836, would have terminated in general and disgraceful bankruptcy. The system has acted conservatively, through the natural force of its inherent power to check expansion. The importation of twenty millions of dollars, the price of our breadstuffs, would have inflated the currency to such an extent, had the banks been at liberty, that, by this time, we should either have failed to perform our contracts, or have returned to Europe double the amount of specie we extracted. The Sub-Treasury kept down the value of foreign merchandise to specie prices; and in the ratio of its influence, in regulating our home market, were our merchants enabled, those, at least, who were moderate in their expectations, to make fair and profitable voyages.

Notwithstanding the gold fever of California, while it draws from the Atlantic some of the most valuable of our population, and brings to our shores, in anticipation of large profits, the rich products of foreign industry, we nevertheless see and feel that there is in active operation a restraining and restrictive supervision. If the consumption do not meet the supply, the depository becomes plethoric, and in the ratio of its extra collections, restrains the paper issues to the criterion of a limited metallic basis. We either take the goods at

a sacrifice, stopping importations, or reshipments must follow, on account of their owners. This check is constant and immediate; its accumulations cannot be concealed nor disguised; there can be no deception nor evasion; and should the banks disregard its salutary admonitions, they would soon find their solvency in imminent danger.

If the head of the Treasury should be authorized to check freely, on the deposits, to discharge the indebtedness of the government, or to transfer credits, to suit the convenience of the department, the Sub-Treasury system would be relieved of an important embarrassment; and, if to this should be added the issue of certificates of deposit to the public creditors, or the admission of transferable credits, on the books of the Sub-Treasuries, every facility would then be afforded, in accommodation of the legitimate business of commerce. In these simple modifications, there would be no material increase in the volume of circulation, while the specie, in deposit with the government, would be more advantageously and conveniently represented; and being so relieved, the substantial objections to the system would be essentially removed.

In this country and in Great Britain, the state of the foreign exchange has been considered a fair evidence of the condition of the bullion market; but with what propriety this has proved a reliable criterion, we can only judge or form an estimate by the many, and apparently unforeseen, repetitions of fiscal panics. This dependence on the current of exchanges has ever proved fallacious. When they are supposed to be favorable, they lead to immediate bank expansions; and when, running counter or adverse, the mercantile public become immediately alarmed, then each individual and monied institution acts on the exclusive principle of self-protection.

The influx into the Sub-Treasury not only gives timely warning, but materially operates to produce a heathful state. If the importations be excessive, the deposit increases, and the banks, losing their specie, have necessarily, from prudential considerations, to curtail their discounts; and as a consequence of this strictiveness, prices fall, and remittances become limited. Though the rate of the exchanges may decline, through the pressure, still, remittances are made with reference to the stringency.

THE TARIFF. If we may judge, from the reluctance with which this subject is approached, there is good reason to believe that there exists an important difference of opinion, among the members of both parties, how far it is expedient to interfere with its operations. It is certain, since the free trade doctrines have been in practice, that the public revenues have increased, and it is equally true, the commerce of the country has been materially expanded. If these are the real signs of prosperity, there can be no cause to complain; and while the foreign exchanges evince a balance of trade in our favor, they would seem to be substantial. In thus stating the case, the apparent evidences are in support of the tariff of 1846; and yet there can be no doubt, that since it has been in full experiment, many of our most valuable domestic enterprises have become embarrassed. There is also this further fact, in favor of our present experience, that almost every shipment made to the United States is extremely profitable, especially those from France; and to such an extent has this been realized, that the fear of any change in our policy is the daily subject of solicitude to the official representatives of that country.

In order to be entitled to a wish, on our part, for a continuance of this peculiar and extraordinary state of our foreign commerce, we ought to be

satisfied that there exists a perfect reciprocity. It is not enough, that those who are immediately engaged in the business of importation, are making successful speculations. We must look further, for the purpose of ascertaining whether the aggregate is beneficial to the whole. The history of Portugal shows that a similar commercial era existed, when large fortunes were amassed, by British merchants, during a period of thirty years, from 1697 to 1726, when upward of \$500,000,000 of gold were withdrawn; and in 1754, when it was discovered that the whole amount of specie did not exceed \$4,500,000, the celebrated Duke of Pombal perceived the necessity of extending protection, and, as a medium of relief, created mercantile corporations, with manufacturing privileges. Is it not possible that this may be our approximate condition? The immense amount of gold imported in 1846, increased by a large demand for our government stocks, has kept down the exchanges, and for the present sustains this adverse trade. There can be no doubt that every article of American produce is extremely depressed, and compared with the value of 1846, scarcely yields a moiety. If we were to consult the Treasury returns, we might be led to believe that our exports were beyond the imports; but, when we reflect that the export invoices are generally made high, on which no duty is paid, and that those of importation are rated low, to avoid the payment of the highest per centage, we must come to the conclusion that the official statistics are little more than vague representations.

But, whether there be any force in these statements or not, one thing is most certain, that the price of money is extravagant, and that most of our valuable manufacturing establishments are prostrate. The cotton, woollen, and iron business is in a most lamentable condition, and in a corresponding manner are our agriculturists, farmers, and planters suffering. In every direction, our operatives want employment, and mining has ceased to be remunerative. These are facts which cannot be questioned. They are matters of general knowledge, such as speak without equivocation, and prove, that whatever may be the flattering theory of free trade, experience will bring us down to practical results.

It would be well to bear in mind the state of commerce, previous to the passage of the act of 1842; because, by so doing, we shall discover our foreign trade to have been precisely the counterpart of that which is now officially esteemed an extraordinary state of prosperity. If Congress and the community would take counsel by the past, the evil day might be avoided; but if they do not, I venture to predict that we will soon perceive symptoms of distrust.

Notwithstanding the millions which have been expended in the erection of iron works, it is an extraordinary fact that there exists but one unfinished contract for railroad bars, which contract is strictly enforced because of the superior quality of the American manufacture. In excuse for this disregard of our home industry, we have the stale apology that there should be no restriction placed on the consumer; but, when we examine into the practical beauties of this theory, every individual might say that he would not pay taxes, because he required no government. In order fully to comprehend the rights of the community, as independent of the individual, it is but necessary to remark, that the sum paid for a ton of domestic iron, is the aggregate compensation of a great variety of labor. In order to produce this ton, we employ miners of ore and coal, the yield of our own soil, and through the whole progress of completion, American labor and capital are sustained; while, on the other hand, if we neglect this cardinal interest, the joint product of almost every in-

dustrial pursuit, we become the patronizers of foreign labor, capital, and enterprise, to the exclusion of our own.

Through this long letter, you will perceive that I hold to no ultra points. Abstractions, in my judgment, very wisely lead to investigation, but, in practice, they never can stand without the support of auxiliary assistance. So with moral and political associations; the doctrines of socialism, universal love, and common property, have no reality as the elements of strength, combination, and prosperity. I am, however, a substantial believer in the effective preservative policy of the Sub-Treasury; and I would look to the advent of a national paper currency, based on the hypothecation of stocks, as the certain road to ruin.

I will now finish with a suggestion, perhaps as novel as in the onset it will be unpopular; but, being practical and of easy execution, it may merit the most serious consideration. I thus venture to deliver my views for what they are worth, under a full sense of the delicate obligation, we all and individually owe to each other and to the country, not to interfere with subjects and controversies purely sectional, unless there exists a reasonable prospect of rendering an efficient service, private or public. It cannot be disguised that the slavery question, to which I allude, has assumed a shape and interest at home and abroad, which calls on every one, associated with the excitement, maturely to weigh and deliberate, not only the motive with which he acts, but what is to be the probable result. To take any other view of this peculiarly embarrassing matter, would evince a predetermined disposition to seek the end, heedless of the consequences. It certainly does not evince any regard for the true principles of philanthropy, to press forward an event, either through the desire to indulge the kindest feelings, or to advance some plausible political assumption, where the issue may lead to the most indescribable atrocities; and to such an extent may this mischief propel itself, that those who are now instrumental in bringing it about, may, in turn, become the avengers of scenes of the most savage barbarity. I will press this phase of the subject no further, leaving to the good common sense of those who feel a conservative disposition to measure and reflect on the whole matter with humanity, and in a spirit of mutual and reciprocal fellowship.

It is probable that those who are most urgent in precipitating abolition, would risk throwing the country into a civil, and with its inevitable attendant, a servile war, to gratify a morbid propensity to interfere with interests which do not immediately, or, at least, do not directly affect them, and of the most insidious and dangerous of these disturbing elements we may rank the recent political crusade, the sudden and extraordinary revelation of the obligatory duties of a sectional free soil patriotism. I have been through the South, and visited the Island of Cuba, observing with solicitude the state and condition of the colored population, and in addition to these opportunities for inquiry, I have sought, with much assiduity, every means of acquiring information, as to the effect and influence of emancipation in the West Indies. I may be mistaken; I may have formed a wrong estimate; but my uniform conviction has been, that a state of dependence and reliance on the forecast and providence of white supervision is essential and necessary to the comfort of the blacks. I know there are exceptions to this general conclusion; but they are like the dark spots on the sun, they do not invalidate the material truth. There are, however, exceptional practices among the blacks, but even these are not universal, which might and ought to be restrained, but which can only be eradicated through the superior social influence of their more fortunate neighbors.

In the West Indies, where emancipation has been proclaimed with the loud

and clarion voice of liberty, those who work are most indifferently compensated, irregularly employed, their families entirely dependent on the pittance remuneration received for their industry; while those who seek service, but to satisfy the immediate wants of nature, live in a state of the most wretched indigence. To such an extent was the universality of indolence and improvidence in the favored and wealthy Island of Jamaica, that it became necessary to import, at the public expense, as apprenticed labor, the re-captured negroes on the coast of Africa, and even this extraordinary means of acquiring agricultural substitutes has proved a complete failure. The Island of Jamaica, like almost every other similarly free, has fallen from the highest state of prosperity into the most serious embarrassments. What is the situation of the anomalous republic of Saint Domingo, but a spurious experiment at civilization. The government is a despotism, and the people nothing better than the vassals of power; and the experiment here, of civil liberty, was ushered in through the most diabolical exhibitions of fiendish atrocity. If there was a crime unknown to revolutionary France, St. Domingo could have furnished the illustration. Men, women and children were abused, polluted, and sacrificed; and there are those who sought the United States, in such wretchedness, as an asylum, who cannot recall to their recollections the dangers they passed without shedding a sad and melancholy tear on the prospects of those who may be similarly exposed.

As an aggregate, the southern slaves are in a much more contented state, subject to fewer wants, solitudes, and privations, than populations claiming to be civilized. The serf subjects of northern Europe are sold with the soil, bound with it, through curbs and difficulties they have neither the knowledge nor presentiment to appreciate. If, for argument, it should be admitted that slavery were abolished, and this without reproducing the calamitous results which have attended corresponding experiments, is it not morally certain that the most enterprising and capable would seek employment where the tariff of labor is best understood, and then what would be the result? Would it not terminate in producing a perfect derangement of the remunerative resources of well regulated industry? To the southern emigrant it would be ruinous; and to those who are left behind, having lost an owner's care and their natural dependence, the change would not be less disastrous. The Utopianism of the prevailing philanthropy would soon find a novel field of distress for their sympathy, when political ambition would rail against those who have produced the issues of abolition as the worst enemies of the country.

Let us now examine this subject in another phase. Let us see whether there may not be some pecuniary and political considerations worthy the sound, deliberate attention of statesmen and men of business. Is it not true, that to the confederation we are indebted for the independent power and influence we possess? and, if so, has not this desirable and enviable state been produced, through the combined industry, productions, and enterprise of each and every section of the United States? There are none who will dispute these positions, while there may be some who will doubt that the great substratum of our prosperity, political, commercial, *agricultural*, and manufacturing, is essentially the fruit of southern climes and from southern labor. If it had not been for the devoted patriotism with which the Union has been held together, what would have become of the North, deprived of the rich resources of the South? It was worth a high bid from Great Britain to effect a severance of the confederation, and but for her short-sighted policy she would have extended an insidious liberality to the southern planter, instead of

indulgence to the eastern States during the last war. To the wealth we have accumulated from the European consumption of cotton, rice, and tobacco, do we owe our general prosperity; and but for these great staple commodities, our power over the wants of the transatlantic labor would dwindle down to a mere rivalry. Take away from your control the incidental rule you possess over the industrial pursuits of Great Britain, and her free trade doctrines would be limited to partial favoritism.

I do not mean to infer that our connection is an exclusively one-sided affair. On the contrary, I know that we are reciprocally and intimately dependent on each other, that we could not separate without mutual injury, nor could we exist in friendly intercourse with separate governments. The issue of such an effort would be fatal, and after a long, painful, protracted collision, we might come together without sympathy, with the loss of character and our best interests prostrate.

In this view of this most serious matter, the proposition I now make would, I foresee, lead to those gradual changes and ameliorations which we all must desire, and with mutual compromise and concession, should endeavor to produce. In several sections of the country, emancipation is anxiously desired, and but for the interference of rude interposition, it would have been long since effected. It would be encouraged in those portions of the country where white labor could be safely and advantageously introduced. The North should look well to the result; there is a powerful difficulty to be encountered; the intelligent philanthropist of the South could feel justified in throwing black labor on its own resources, in collision and in connection with the more skillful and provident industry of the white. The colonization society, in despite of its best efforts, and the liberal patronage of the public, meriting the respect of the highest feelings of humanity, is, nevertheless, impotent, as a grand source of relief, while, through the appliances of its organization, it may be enabled to render the most beneficial services; but of this there may be some doubt, as it may be apprehended that Liberia is the beau ideal of the proper scene of action.

Based on their expectations of rendering a great national service in the settlement of free blacks, let Congress establish a territorial government on the Pacific, located in some genial climate, where the soil is easily cultivated, limiting and restraining the emigrant population to the locality selected; we should then have an accessible and practical, an attractive and convenient theatre for colonization. The enterprise of the country bids fair to afford a rapid and easy intercommunication, which would convey thousands at less expense and danger than hundreds now cost. It is needless to talk of the growing prosperity of Liberia, the civilizing influence on the native African. It is but a drop of comfort to our necessities; and addicted to idleness and improvidence, the African brood, in its native aboriginal home, is unsusceptible of exertion.

To the Pacific emigration would flock. Those who parted from the land of their nativity would not feel that they were breaking the strong ties of relationship, nor the hope, the pleasurable hope, of reunion on the territorial soil of the country of their adoption. In thus raising a colony of our colored population on our western shores, we should soon find that the expense of the establishment would be fully remunerated; while in so doing, we could in sound and wise policy declare Liberia free, abandoning it to the fate consequent on its independence. We require no foreign settlements; they always produce trouble; and independent of their extravagance, they assume certain national positions tending to create embarrassments with foreign powers.

Respectfully, yours,

ALEXANDER HAMILTON.

MERCANTILE LAW CASES.

SANDFORD'S SUPERIOR COURT REPORTS.

THIS volume is the first of a series of Reports of the Decisions of the Superior Court of the city of New York, now composed of Mr. Chief Justice Oakley and Justices Vanderpool and Sandford, the latter of whom reports the decisions of the Court.

The Superior Court has, since its organization, maintained a high character for commercial intelligence. Perhaps we are justified in saying that no one court in the United States, since its organization in 1827, has heard so many causes relating to insurance and commercial law (arising in the transactions between merchant and merchant) as the Superior Court. The present volume does credit to its author not only as a reporter, but as a judge, who has, in many cases, given his opinion judicially, at length, on cases reported in the volume before us.

We will refer to two cases, reported at page 361 in this volume. The cases are *Manfield vs. Douglass*—Goodhue and others, which discusses the doctrine of consignments, and the duties and liabilities of factors and agents, when the latter persons have advanced funds at the time, and after the consignments were made, but before sale. A commercial correspondence is set forth at length, between the parties. The plaintiff resided at Chillicothe, Ohio, and the defendants (who were commission merchants) in New York.

The plaintiff had, during the year 1846, consigned a large amount of pork to the defendants, to sell on commission, and the defendants, at various times, had advanced money to the plaintiff. Seventeen hundred and fifty-one barrels were sent to Douglass, from time to time, between the 19th of June and the 19th of August, 1846, who received the same on consignment for sale. The defendant paid the freight and charges of transportation from Chillicothe to the city of New York, the aggregate of which was about \$3,700. The defendant also paid for insurance, inspection, and other incidental expenses, about \$1,200. Thus \$4,900 was advanced, before any of the pork was sold. After the pork was received, the defendant advanced on drafts, and paid at the plaintiff's request, upwards of \$10,000 more, before the pork had been sold. The defendant received a letter from the plaintiff on the 13th February, 1847, directing him to sell pork at \$12 a barrel, and for no less, and also to take advantage of the rise in the market, if there should be any, as the sales were made. On the 14th December, 1846, the plaintiff had written to the defendant to withdraw his pork from market, and not to sell a barrel of his pork at the then present prices. On the 14th of January the plaintiff wrote to the defendant, that if he needed the advances made on the pork, that he would remit the amount, on a reasonable notice. The defendant stated, in reply, that he did not consider himself deprived of the power of selling, if the market goes up to a price which, in the exercise of a sound judgment, he might think best to secure. The pork was sold, after the instructions were received, for the sum of \$9, \$9 12½, \$9 25, and \$9 37½ per barrel, and ranged as high as \$9 75 in January. It rose to \$12 in February. The plaintiff, when notified, disapproved of the sales in January, and wrote to the defendant, on the 14th of January, that the sales had been previously made contrary to his positive orders, and he should expect that the defendant would replace his pork by other pork of as good a quality as the plaintiff's brand. On the trial, it was admitted by the defendant that the price of prime pork, on the 13th February, 1847, when he received the plaintiff's letter directing him to sell, was from \$12 50 to \$13 a barrel, and that the difference between the \$12, and the price for which the defendant sold 1,051 barrels, amounted to \$2,921 37½; which sum, with interest, the plaintiff claimed to recover. The Court, in giving their opinion, which is delivered at length in this volume of reports, came to the conclusion—

1st. That the factor has a right to sell enough of the goods consigned to him

to pay his advances upon the goods at the time he receives the same; and that, for subsequent advances, the factor has also the right to sell so much of the goods as is necessary to make up the subsequent advances, unless the consignor tenders to the factor the amount of his indebtedness; and also that the factor is bound by instructions, and is bound to make good the loss for sales made by him, beyond the indebtedness to him.

2d. That when the factor has received instructions not to sell, he, the factor, will be liable to his principal in damages, if he sells more than enough to repay his advances.

3d. That advances made by a factor for freights, duties, warehouse, insurance, and inspection charges, clothe the factor with the same authority to sell as advances directly made to the principal in money.

4th. That a promise made by a factor to withhold consigned goods from the market is void, for the want of consideration to the extent of sales made necessary to pay the amount of advances due by the principal. The plaintiff, in one of these cases, recovered judgment for the amount which the pork ranged in market at the time the consignor gave liberty to sell, beyond the price which the pork actually sold for, to the extent of the overplus of sales, beyond what was necessary to reimburse the factor's advances.

In the other cases, it appeared that the defendant had not sold more pork than enough to realize the amount of the consignor's indebtedness to the factors for advances; and although the pork had been sold contrary to instructions of the principal, and at a loss of near \$5 per barrel below the market price, at the time the principal had directed the pork to be sold, yet judgment was rendered for the defendant.

One of the defendants wrote the plaintiff on the 30th January, 1847, that he claimed the right to sell merchandise held under advances at his discretion, and it seems the Superior Court sustained him in this position.

The next case we call the attention of the public to, is that of *Cowperthwaite* against *Sheffield*. This was an action on Bills of Exchange, drawn by *Reed & Co.*, of Mobile, in February, 1837, on *Kelly & Co.*, of Glasgow. The doctrine laid down by the Court in this case is, that a Bill of Exchange, drawn against a consignment of goods, does not operate as an assignment of the proceeds, unless there is a letter directing such specific application accompanying the consignment; nor does such a consignment bind a consignee to accept the bill, or apply the proceeds to its payment, unless the consignment directs it to be done.

We have always supposed this to be the law, and to prevent the consignor drawing bills against consignments made, and then, after the bills have been sold in market, going to the consignee and withdrawing the proceeds of the consignment to his own use, and defrauding the endorers of the bill. We have in our own mind believed it to be a necessary rule for commercial safety, that the bill of lading directing the payment of the bill of exchange, or the transfer of the goods by the consignee to the holder of the bill when present, all should be attached to it, or accompany the bill of exchange; indeed, a copy of the bill of exchange ought to be attached to the bill of lading, or the bill of lading should contain a note that a bill of exchange had been drawn against the consignment, and that, if the consignee would not accept the bill of exchange, the property was to be passed over to the holder of the bill of exchange.

The Court also held in this case that an order, drawn in express terms for a particular fund, will operate as an assignment of that fund; but that such an order is not a bill of exchange, and is not negotiable.

We also call the attention of the public to a case at page 351, of *Wilson* against *Little*. The Court held, in this case, that when personal property, consisting of railroad stock, is pledged to secure a debt payable on demand, that the pledgee, or holder of the stock, cannot sell the stock or property without first demanding payment of the debt.

There are many other cases reported in this volume, of a commercial character, several of which relate to mutual insurance companies. We refer to a case page 158, which was an action brought by the receiver of the *Croton Insurance Com-*

pany, to recover the amount of a promissory note for \$5,000, made by the defendant as one of the mutual stockholders of the company. The Court held in this case, among other things, that such a note was valid in the hands of a receiver for the purpose of paying losses after the company became insolvent, though the maker had not received the amount of the note for his premiums on insurance, made by the company; and also that an agreement made by the president of the company, on receiving such a note, that it should be given up at maturity, was void, as a fraud upon the creditors of the company.

Indeed, we hope that our commercial readers will look at Judge Sandford's book. They will find a great deal of commercial law ably discussed, clearly and logically written, and in a style that does credit to the author and the judges of this highly useful court, which, under the late amendments of judiciary law, has become a branch of our Supreme Court, as appeals are made from the former court directly to the Court of Appeals, which is the one of dernier resort in this State.

THE LAW OF PATENTS.

The Queen vs. Prosser.—In the Court of Chancery, this case, which was an appeal from an order of the Master of the Rolls, was argued last week. The question was, whether the Attorney General was warranted in admitting a Mr. Van Wart, a citizen of New York, not a subject of or domiciled in this country, to sue out a *scire facias* for repealing, or inquiring into the merits of Mr. Prosser's patent for manufacturing iron pipes. Another objection to the Attorney General's fiat for issuing the *scire facias* was that the bond given by Van Wart for securing the costs was insufficient, considering that he was an alien. The Master of the Rolls having decided that the Attorney General had uncontrolled discretion in the whole matter, dismissed the application to him with costs. The Lord Chancellor now giving his judgment on the appeal, said he was of opinion during the argument that the Master of the Rolls was right, and now, after reading the papers and affidavits on the matter, he had no reason to alter that opinion. His lordship having stated the principal objections made to the course pursued by the Attorney General, said the matter was entirely within his discretion. He (the Attorney General) was himself the prosecutor of the *scire facias*, and had a right to avail himself of the information of every person he pleased to investigate the merits of the patent, to defend the prerogative of the crown and the interests of the public. With respect to the bond for costs, that was of modern introduction, even within living memory, being first taken by Attorney General M'Donnell, (as we understood,) who considered that as any person might put the crown in motion to investigate the rights of a patentee, it was but just that the latter, if his rights turn out to be unimpeachable, should have his costs secured to him. That matter was also in the discretion of the Attorney General. If the Attorney General saw it proper to put this patent in a course of investigation, this court had no jurisdiction to control or regulate his proceeding. The Master of the Rolls: judgment must be affirmed. Mr. Webster: And with costs! The Lord Chancellor: It is for the Attorney General to consider as to costs. The Attorney General made no reply.

COMMERCIAL CHRONICLE AND REVIEW.

THE MONEY MARKET—IMPORTS AND DUTIES AT PORT OF NEW YORK FOR SIX WEEKS—IMPORTS OF NEW GOODS AT PORT OF NEW YORK—FOREIGN MARKETS—RISE OF UNITED STATES STOCK AND BRITISH FUNDS—QUOTATIONS OF AMERICAN STOCKS IN LONDON—DEMAND FOR NEW YORK STATE STOCKS—BANK CIRCULATION OF NEW YORK—SECURITIES FOR FREE CIRCULATION IN THE HANDS OF THE COMPTROLLER—AMOUNT OF NEW YORK STATE STOCKS HELD AT HOME AND ABROAD—RATES OF EXCHANGE IN NEW YORK—IMPORTS OF BREADSTUFFS INTO GREAT BRITAIN—CONSUMPTION—RECEIPTS OF WHEAT AND FLOUR AT TIDE-WATER VIA NEW YORK CANALS, AND WEEKLY PRICE OF FLOUR FROM 1845 TO 1848, INCLUSIVE—COMMERCIAL PROSPECTS—OPERATION OF THE CALIFORNIA GOLD FEVER—THE LAW OF COMMERCIAL REVULSIONS—SYMPTOMS OF A TENDENCY TO SPECULATION—RAIL PROJECTS, ETC.

MONEY, which was in growing abundance until the close of January, subsequently became somewhat more in demand, under the influence of many operating causes. Among these were the large importations of goods, accompanied by an early and active demand, for the spring trade, causing the prompt payment of considerable sums in specie for duties, the usual demand for money for the payment of rents at the February quarter, and the extensive influence of the California excitement, which caused a demand for considerable capital, and has aided to advance the rate of money in all the Atlantic cities, Boston and New York more particularly. The importations at the port of New York for January and the first week in February, for two years, have been as follows:—

IMPORTS AND DUTIES AT THE PORT OF NEW YORK FOR SIX WEEKS ENDING FEBRUARY 16.

	Specie.	Free.	Dutiable.	Total.	Duties.
1848	52,209	520,652	11,344,296	11,917,157	2,865,365
1849	60,700	620,945	11,210,034	11,891,679	2,750,967

The quantity of dry goods imported in the same period, distinguishing the general descriptions, was as follows:—

IMPORTS OF DRY GOODS AT THE PORT OF NEW YORK.

Week ending—	Wool.	Cotton.	Silk.	Flax.	Miscellaneous.	Total.
January 5....	\$6,544	\$88,886	\$128,679	\$13,807	\$21,223	\$259,139
" 12....	59,539	95,237	416,355	26,903	34,349	632,383
" 19....	84,779	131,956	318,921	58,946	94,006	689,615
" 26....	170,411	417,814	913,690	136,074	97,611	1,735,590
February 2....	166,132	463,737	547,671	190,768	177,925	1,546,233
" 9....	305,811	623,021	571,116	161,572	167,936	1,819,454
Total.....	\$793,216	\$1,820,651	\$2,896,232	\$578,060	\$593,050	\$6,680,156

This very considerable supply composes the imports for the spring business down to its commencement, which was this year early. These large importations being in demand for the spring business, required large sums in specie for the discharge of duties, and these operated upon the banks to prevent the loan of money for other than the most legitimate commercial transactions. The operation of business upon the cash system, now comparatively prevalent in reference to the extended credits of former years, is to promote an abundance of money.

In former years, when there was a constant demand for capital on the part of those whose sales were on more extended credits than those on which they are enabled to purchase, the progress of the spring trade enhanced the scarcity of money. In the present time, when sales at shorter credits involve payments from the

As the season progresses the supply of money keeps pace with, and rather exceeds demand, causing a fall in rates, more particularly when the exports of cotton are greater in volume and rising in values. This is now the case in American produce in Europe. Commercial affairs, which were last year depressed and convulsed, have accommodated themselves to the political circumstances of the day, if not entirely relieved from the fears which those circumstances excite. The industry of England and of Europe has revived to some extent, the small purchases of last year will probably require to be compensated by an increase of demand for the present year. The prices of cotton have advanced under very considerable sales, and the health of the demand for cotton and provisions has been extended by the final removal of the sliding import laws in England on the 1st February, according to the terms of the 14th of the day, the duty being now 1s. per quarter, say 3 cents per bushel, on all the improved confidence in affairs, resulting from the election and peace-ratification of Prince Louis in France, has promoted the facility of realizing both stocks and real estate, in France. The rise in values is, however, due to the fact that many avail themselves of the ability to sell at all, in order to transfer their property to countries of more stable governments. In England also, the financial reform movement of the association headed by Mr. Cobden, expresses the desire to reduce the expenditure of the British government to that of 1835, or, in other words, to effect a saving of £10,000,000 per annum, thereby the saving to a corresponding reduction in those indirect taxes which heavily upon the "springs of industry," and by so doing retard the consumption of manufactured goods, and therefore lessen the amount of trade and the general prosperity, presented so formidable a front that the minister's intention of forestalling the movement by commencing the reform. This has given great satisfaction as indicating the bringing of the expenditure within the revenues, also proclaimed confidence in the continuance of peace, as manifested by military expenditure. The effect of these circumstances combined was, in the latter weeks of January, to cause a rise of 2 per cent in the prices of American stocks, and so far to promote the demand for American stocks as to add to the States 6's some five per cent, showing sales for the first time in years at a premium. The quotations appear to have run as follows:—

QUOTATIONS OF AMERICAN STOCKS IN LONDON—BARING'S QUOTATIONS.

	United States 6's, 1866.	New York 5's, 1866.	Pennsylvania 5's.	Ohio 6's, 1866.	Massachusetts 5's, sterling.	Louisiana 5's, 1865.
.....	.....	.....	63 a 65	.....	.....	.....
7.....	94 a 96	89 a 91	63½ a 66	85 a 87½	92 a ..	76 a 80
7.....	94 a 96	89 a 91	65 a 66	85 a 87	96 a 98	80 a ..
25.....	96 a 98½	89 a ..	66 a 68	90 a ..	.. a ..	.....
22.....	96 a ..	*90 a 91	66 a 67	87 a ..	*96 a 98	.....
10.....	97 a 97½	.. a ..	65 a 66	88 a 89	94 a 95½	.....
17.....	95 a 97	88 a 89	66 a 67	89 a 90	93½ a 94½	.....
1.....	96 a ..	90 a ..	67 a ..	90 a 91	94 a 96	85 a 86
15.....	96 a 97½	91 a ..	70 a ..	91 a ..	96 a 97	86 a ..
May 26..	104 a 105	92 a ..	71½ a 72½	93 a ..	98 a 99	87 a ..

Advance in United States stocks during the year has been 10 per cent in round other descriptions have partaken to a greater or less extent of the

* With dividend.

demand. Louisiana also improved 10 per cent, Pennsylvania 5's 8 per cent. New York 5's were already pretty well improved before under the demand which had been created by the New York banks, pursuant to the law which requires the deposit of New York State stock with the Comptroller as security, dollar for dollar, for all notes issued to circulate as money. In the year 1847 there was quite a disposition to create new banks, and the purchase of New York stocks for that purpose caused a considerable rise in the prices. In December of last year this movement promoted a panic, and the failure of some of the banks and a decrease in securities results this year. Thus the increase in New York stock, in 1847, held by the State Comptroller as security, and decrease in 1848, was as follows:—

	Increase, 1847.	Decrease, 1848.	Increase, 1848.
4½ per cents.	\$37,400	\$2,000	.....
5 "	2,343,547	574,307	539,194
5½ "	407,000	.....	26,500
6 "	454,078	.....	.....
7 "	185,873	262,532	.....
United States.....	9,000	.....	.....
Total.	\$3,436,403	\$888,841	\$565,694

Originally, the law required the 6 per cent stocks of any of the United States, or bonds and mortgages, to be deposited as security. There were no United States stocks in existence when it was passed, the national debt having been finally extinguished in 1835. A brood of banks grew out of this, which nearly all exploded, suggesting many changes. Accordingly, the securities were restricted to New York stocks, United States stocks, and bonds and mortgages. Speculators in New York stocks then succeeded in creating a demand for them by getting a bill passed to exclude United States stocks. The failure of the Atlas Bank then demonstrated the unavailability, as security, of large mortgages without power to foreclose, and the reception of mortgages was restricted. It is now sought to restore United States stocks as security, and to require the withdrawal of all mortgages now held at the rate of 10 per cent per annum, to be supplied by United States or New York stocks. Last year a bill passed the Legislature permitting chartered banks to extend their circulation beyond the limits of the restraining act of 1847, by giving "ample security," which was construed to mean stocks. The circulation of the banks of New York, since the enactment of the new law, has been as follows:—

BANK CIRCULATION OF NEW YORK, DISTINGUISHING FREE AND CHARTERED.

		Circulation.		Total circulation.
		Chartered.	Free.	
January,	1839.....	\$19,373,149	.....	\$19,373,149
"	1840.....	10,360,592	\$3,859,712	14,220,304
"	1841.....	15,235,036	3,221,194	18,456,230
"	1842.....	12,372,764	1,576,740	13,949,504
"	1843.....	9,734,465	2,297,406	12,031,871
November,	1843.....	13,850,334	3,362,767	17,213,101
"	1844.....	15,144,686	5,037,533	20,182,219
"	1845.....	15,831,058	5,544,311	21,375,369
"	1846.....	16,033,125	6,235,397	22,268,522
May,	1847.....	17,001,208	6,808,345	23,809,553
November,	1847.....	16,926,918	9,310,378	26,237,296
March,	1848.....	14,391,504	8,656,522	23,048,026
November,	1848.....	14,311,077	8,895,272	23,206,289

The unsecured circulation of the chartered banks continues to form the largest

of the whole. The securities deposited for the free, have fluctuated as

SECURITIES FOR FREE CIRCULATION IN THE HANDS OF THE COMPTROLLER.

	No. of banks.	Bonds.	Western State stocks.	United States stocks.	New York stocks.	Total securities.
1	48	\$1,629,176	\$1,686,500	.....	\$979,500	\$4,927,671
2	52	1,486,194	2,025,254	.....	1,225,837	.....
3	58	1,525,540	1,900,663	\$52,000	1,774,484	5,252,638
4	65	1,580,526	1,819,293	105,000	3,064,905	6,569,726
5	67	1,655,589	1,704,293	105,000	3,805,463	7,270,344
6	70	1,552,265	1,667,700	105,000	4,472,845	7,797,811
7	88	1,559,362	1,453,924	114,000	7,900,229	11,037,525
8	104	1,514,979	1,334,204	114,000	7,627,692	10,590,186

insulation of these free banks is very nearly the same as the sum total ofurities. It will be observed that the Western stocks held were deposited when the law was first enacted, and before the failure of those States. Since legal restrictions have promoted the deposit of New York stocks, New York State stock and a portion of lands and mortgages only being allowed; but of New York stocks having reached a high figure, 110 per cent for the time being, it is before the Legislature to permit those of the United States to be received as security, and to compel the withdrawal of all mortgages. The bill would be to promote a demand for United States stocks for bank-cesses. The effect of the law has already been to draw a large amount of foreign stocks from Europe, to an extent indicated in the following table. The Comptroller, in answer to a legislative resolution, transmitted a return annex in which the present State debt is held, as follows:—

NEW YORK STATE STOCKS.

Position of stocks.	Held in foreign countries.	Held in this country.	Total.
State stocks.....	\$5,954,160	\$10,722,498 91	\$16,676,658 91
Fund stocks.....	.....	909,607 00	909,607 00
Miller's bonds for State treasury.....	20,950	1,399,741 45	1,420,691 45
Stocks held to railroad comp. New York and Erie.....	308,000	2,692,000 00	3,000,000 00
Stocks held to Oswego.....	116,300	199,400 00	315,700 00
Stocks held to Erie and Catskill.....	118,000	82,000 00	200,000 00
Stocks held to Albany and Syracuse.....	102,000	98,000 00	200,000 00
Stocks held to Rochester.....	7,000	193,000 00	200,000 00
Stocks held to Albany.....	1,000	99,000 00	100,000 00
Stocks held to Berkshire.....	.....	150,000 00	150,000 00
Stocks held to Albany.....	16,000	84,000 00	100,000 00
Stocks held to Albany and Troy.....	10,000	90,000 00	100,000 00
Stocks held to Albany, Iron, Mining Company, &c.....	1,000	69,000 00	70,000 00
Total.....	\$6,654,410	\$16,788,247 36	\$23,442,657 36
Stocks held to Albany and Hudson Canal Company, (no statement received from transfer officer).....	.....	.....	300,869 44
Total.....	.....	.....	\$23,743,526 80

The above statement shows who the holders are, as they appear on the books; it may be and often are held by citizens here in trust for persons residing abroad, without that fact appearing on the transfer book.

In a Comptroller's report for 1843, a similar statement was put forth in comparison of the two statements results as follows:—

NEW YORK STATE STOCKS.			
	Held in United States.	Held in Europe.	
September, 1842.....	\$15,817,248	\$10,120,000	
January, 1849.....	16,788,247	6,654,410	
Increase.....	\$970,999	.....	-
Decrease.....	.....	\$3,465,590	

A portion of the Canal debt, and of the Delaware and Hudson Canal, has been paid off since 1842, and a considerable portion of this was held abroad. It appears that there has been a large additional amount sent here—the balance of the outstanding New York stock, a less proportion is held abroad now than in 1842. This undoubtedly arises from the fact that the operation of the banking law has been, by raising prices, to draw the stocks to this country from those institutions here, where for a long time they have been investments, into the hands of weak bankers, and where they now tremble in the market, and are liable on the occurrence of every pressure to tumble down. In 1842, when \$10,120,000 of New York stocks were held abroad, the Comptroller of the State held \$1,229,130 of New York stocks as security for the new banks. On the 1st of December last he held for the same purpose \$7,627,092. Thus, in the six years, \$6,397,962 of stocks were drawn from the Comptroller's hands as securities for bank notes. Of these, near \$3,500,000 were chased in 1847, and the price advanced from 102 in July to 109 in December, in consequence. The result of this rapid multiplication of banks was a glut of some of them, a selling out of and a fall in the stocks. The quantity of United States stock now going abroad will more than compensate for a glut produced.

The Vice-President elect, as Comptroller of New York, in his report proposed the enactment, by Congress, of a law similar to that of New York, which the United States stock should be deposited as security for a "national currency," and an effort to effect this will doubtless be made. Such a law, banking can, however, at best be but temporary, inasmuch as that in a large portion both of the United States and New York stocks will be put into the means of security therefore abolished. All these banking moves, however, the elements of an approaching season of speculation.

The actual withdrawal of a considerable sum of New York stocks from foreign investments has doubtless affected exchanges; but the new demand for securities is, however, hastening forward amounts that enhance the supply of bills upon the market, already somewhat in excess of demand from considerable exports of produce, notwithstanding the large comparative import. The rates of bills have been as follows:—

RATES OF EXCHANGE IN NEW YORK.					
	Sterling.	Paris.	Amsterdam.	Hamburg.	
September 1.....	9 a 9½	5.20	40 a 40½	35½ a 35¾	
“ 16.....	9 a 9½	5.20	40 a 40½	35½ a 36	
October 1.....	9½ a 9¾	5.25	40½ a 40¾	35½ a 35¾	
“ 16.....	8½ a 9	5.25	40½ a 40¾	35½ a ..	
November 1.....	.. a 8½	5.17½	40½ a 40¾	35½ a 35¾	
“ 16.....	8½ a 9½	5.16½	40½ a 40¾	35½ a 35¾	
December 1.....	8½ a 9	5.20	40½ a 40¾	35½ a 35¾	

8½ a 8½	5.22½	40½ a 40½	35½ a 35½	78½ a 79
8½ a 9	5.22½	40½ a 40½	35½ a 35½	78½ a 78½
8½ a 9	5.20	40½ a 40½	35½ a 35½	78½ a 78½
8 a 8½	....	40½ a 40½	35 a 35½	78½ a 78½
7½ a 8	5.32½	40 a 40½	34½ a 35	77½ a 78½

ates, under the strength of the demand as indicated in the
rts, show how great has been the influence of rising rates for
; under increased exports, supported by the improved demand
ese afford indications of the possible reflux of the precious metals
l States when the bulk of the spring imports may have been
e remembered that the wants of England in respect of bread-
ry large, notwithstanding that her crops have been good.
and consumption of breadstuffs in Great Britain, for the eleven
ave been as follows:—

IMPORTS INTO GREAT BRITAIN DURING THE ELEVEN MONTHS ENDING DE-
CEMBER 5, 1848.

	IMPORTS.		CONSUMED.	
	1847.	1848.	1847.	1848.
.....qrs.	2,418,342	2,058,786	2,613,506	1,821,191
.....	754,457	824,300	766,763	798,949
.....	1,633,808	865,728	1,688,324	841,401
.....	68,225	41,984	68,365	37,589
.....	129,201	149,315	165,497	144,474
.....	376,789	433,700	420,910	417,604
.....	3,560,266	1,397,388	3,500,547	1,893,599
.....	22,937	205	23,349	205
.....cwt.	6,296,661	1,157,917	6,776,436	1,074,461
.....	11,791	246	11,791	45
.....	57,966	2,755	57,991	2,179
.....	777,107	32,859	777,107	20,323
.....	71	28	71	28
.....	1,437,951	210,084	1,439,078	186,177
.....	862	195	862	179

import reaches for the year the following enormous amounts:—

	November.	Eleven months.
.....qrs.	212,359	2,058,786
.....	434,870	3,712,470
.....	647,229	5,771,806
and meal.....cwt.	284,139	1,403,889

f food cannot be valued at less than \$55,000,000, imported into
a good harvest, and not only without disturbing her currency,
constant accumulation of specie and a growing abundance of

trade, the regular rate for food, removed duty, and cheapness
ill doubtless promote a further enhanced consumption of food,
that the railroad calls are again become very considerable, hav-
9,342 for January, 1849. The deliveries of flour upon the tide-
ble works are powerfully affected by the state of the foreign
cation of this is afforded in the weekly deliveries of flour and
ndson from the New York canals for several years, with the
lour in New York for the last two years.

RECEIPTS OF WHEAT AND FLOUR AT TIDE-WATER VIA NEW YORK CANALS, AND WEEKLY PRICES OF FLOUR IN NEW YORK FOR 1845-6-7-8.

	1846.		1846.		1847.
	Flour. Bbls.	Wheat. Bush.	Flour. Bbls.	Wheat. Bush.	Flour. Bbls.
To June 1st. . .	466,677	71,347	482,422	129,744	609,935
June.—1st week	62,272	14,278	109,083	63,530	179,417
2d "	54,871	14,433	136,296	59,122	183,261
3d "	55,964	19,185	119,765	32,970	147,600
4th "	46,777	27,582	128,644	33,229	234,531
July.—1st "	39,774	28,233	88,208	61,343	218,100
2d "	86,391	12,869	82,828	68,717	129,500
3d "	50,789	27,152	183,722	87,948	146,133
4th "	59,282	21,573	65,490	79,363	151,016
Aug.—1st "	46,468	549	50,520	31,247	104,268
2d "	41,187	7,402	52,738	36,554	79,963
3d "	42,943	15,421	65,175	85,826	99,371
4th "	53,909	29,080	73,218	75,094	104,280
Sept.—1st "	49,458	21,032	51,235	80,170	74,706
2d "	75,819	34,825	69,009	137,118	68,086
3d "	77,078	70,871	79,157	159,425	69,740
4th "	82,289	88,797	115,630	156,090	90,626
Oct.—1st "	89,412	75,572	106,026	135,125	96,133
2d "	81,322	82,600	98,032	193,127	103,504
3d "	127,599	144,945	120,682	269,205	126,717
4th "	146,858	182,156	65,166	123,034	149,400
Nov.—1st "	146,397	126,180	178,488	282,499	168,718
2d "	132,114	110,190	196,104	211,105	150,097
3d "	240,580	185,543	240,652	203,249	176,886
4th "	179,350	197,269	144,450	123,179	274,633
Total . . .	2,487,587	1,581,492	3,300,050	2,923,664	3,944,818

TABLE—CONTINUED.

	1847.		1848.	
	Wheat. Bush.	Price of flour.	Flour. Bbls.	Price of flour.
To June 1st. . .	318,540	\$9.25	366,078	\$5.35
June.—1st week	250,668	8.75	59,888	5.37½
2d "	240,652	8.81	61,540	5.62½
3d "	318,204	8.00	102,714	5.25
4th "	438,004	7.12½	85,764	5.25
July.—1st "	262,089	7.25	61,303	5.18½
2d "	159,991	6.50	75,557	5.13½
3d "	95,123	6.12½	77,682	4.97½
4th "	143,618	5.25	62,302	5.18½
Aug.—1st "	106,594	6.25	51,032	5.25
2d "	55,912	6.00	44,836	5.37½
3d "	69,821	5.87½	52,169	5.75
4th "	83,517	5.87½	69,249	6.00
Sept.—1st "	81,300	5.87½	69,038	6.13
2d "	61,171	5.62½	86,333	6.00
3d "	76,145	5.62½	123,908	6.75
4th "	69,335	5.87½	126,773	6.87½
Oct.—1st "	61,720	5.87½	140,106	5.37½
2d "	50,286	5.87½	129,681	5.50
3d "	138,986	6.63	155,887	5.37½
4th "	153,347	6.68	226,145	5.25
Nov.—1st "	117,692	6.37½	189,370	5.20
2d "	159,203	6.25	159,512	5.37½
3d "	248,256	6.12½	263,991	5.37½
4th "	407,842	6.27½	228,190	5.31½
Total . . .	4,158,010		3,068,573	3,079,262

The aggregate value of this grain sums up as follows:—

	1844.	1845.	1846.	1847.	1848.
Value of wheat	\$1,211,759	\$2,005,140	\$3,866,141	\$7,122,170	\$3,677,020
“ flour..	9,999,918	13,653,898	15,470,271	27,380,170	17,471,401
Total.....	\$11,211,677	\$15,659,038	\$18,886,412	\$34,502,340	\$21,148,421
Quantity in bush.	12,373,369	14,019,427	19,423,914	23,882,100	18,771,609

The prices in June, 1847, were high, and the effect had been to send down an enormous quantity of flour and wheat early in the season. With the decline in prices the supplies fell off to a low figure in August and September, and again became important as the English demand revived in the fall. In the last year reverse was the case; and although prices were at a fair level for flour, they, being comparatively much lower than in the previous year, induced small receipts, and these did not increase in magnitude until the English demand again advanced upon the seaboard in August and September. The result for the season was a large delivery as in any former year prior to 1847. It is very evident that a ready price at or about \$6 00 per barrel in New York will command almost any supply from the interior. In 1847 the supply was limited only by inadequate means of transportation, freights being at exorbitant rates. Those high freights needed a great increase in ship and canal boat building, and the means of transport for the last year were greater than ever. The steady operations of this stimulus to supply and transport likely to be applied by the large demands of England under the removal of duties, must necessarily afford a supply which can rarely be limited in extent. The fiscal year of the United States ends June and that of the canal season with November. The value of the exports of sundry articles and provisions from the United States, as compared with the value of the same articles delivered on the Hudson river from the New York canals, is daily given as follows:—

	1846.	1847.	1848.
Export from United States....	\$27,701,125	\$68,701,921	\$37,472,751
Delivered on the Hudson.....	30,348,790	50,302,275	33,987,012

These figures show to how great an extent a favorable export trade swells the business of the canals, and therefore promotes the general prosperity of the whole agricultural sections. Thus the able reports of the Commissioner of Patents, Edmund Burke, Esq., than whom no gentleman has, in official station, been more helpfully useful, estimates the wheat crop of 1847, for the Union, at 114,245,500 bushels, and the crop does materially vary from year to year. Now, from the above table, it appears that this crop, at New York prices, was worth \$125,685,000, but at the prices of 1847, \$171,367,750; an increase of \$45,682,750. The actual value of the wheat and wheat flour exported in that year, was \$32,183,161; consequently, had that quantity been given away, the farmers would have gained \$149,589 by the enhanced price which the remainder sold for at home, in consequence of taking that quantity out of the market; but a large price was obtained for it abroad, and the value of the present crop, and the general prosperity, will be sustained by the same operation.

All the elements of a season of great prosperity continue to present themselves. Money in England is abundant, food at a fair level, labor abundant, and prices of produce and raw material comparative low; while stocks of goods, as in England as in the countries she supplies, are by no means large, and the

demand improving under confidence of continued peace and a renewed spirit of enterprise. In the United States the outstanding credits are perhaps as small as ever before, when so great an amount of business is being transacted. Exchanges are in favor of the country, with every prospect of lucrative sales of crops that are somewhat in excess of the few past years in quantity.

The operation of the California gold fever has been to impart a strong spirit of speculation, and to induce enterprise in all commercial countries of a character more bold than any that has marked commercial operations of the past few years.

Commercial affairs generally move in a circle of some ten years, during which they become active; boldness of enterprise increases, running into speculations, the hazardous character of which becomes constantly more apparent, until a general explosion ends in wide-spread insolvency. In the great money centres of the world these symptoms are the first apparent, and the approaching danger the soonest described. London, in the last thirty years, has four times experienced great financial distress. The close of the war, in 1815, found her financial and commercial affairs in the greatest depression. They gradually revived, until the passage of what was called Peel's bill, or an act to compel the bank to renew specie payments passed in 1819. That event spurred speculation, until the most extensive explosion took place in 1825, involving the failure of great numbers of merchants, among them the celebrated American banker, Samuel Williams, Esq. Recovery followed, and confidence increased, until in 1835-6, a renewed disaster prostrated numberless firms, and among them the three great American bankers, Wildes, Wiggins, and Wilson, followed by all the bankers, and most of the merchants in the United States. Again a revival took place, and enterprise ran into disastrous speculation, ending, in 1847, in a revulsion in England, almost fatal to British credit. Eminent merchants went down by the hundreds, and bills on England became of most doubtful character. The United States were but little affected by that disaster, because, after the revulsion of 1837, the credits with England did not revive, and many of the numerous banks that had failed in the United States were not resuscitated. England is now rapidly recovering from that revulsion. American produce is again selling freely at higher prices, and every element of prosperity is in action. The result is, that in all directions the desire to extend bank credits is manifest. In Illinois, Michigan, and Ohio, paper schemes are being projected. In Pennsylvania, a change in government favors the renewal of those money charters that expire in a short time; and in New York the multiplication of banks under the new law is very rapid. All these are symptoms of growing speculation; but as yet the ground is firm, the national wealth great, and the floating capital of the country never greater than now.

The latest accounts of commercial affairs in every department in Great Britain show increasing activity and great buoyancy. Cotton was advancing slowly but surely, and sales to a large extent were made two weeks prior to the sailing of the Europa. Money continued plentiful, and first class bills were readily discounted as low as 2 per cent. The demand for United States six per cents was increasing at advancing rates. Sales had been made at 107, and the prices of the State stocks were also improving; Pennsylvania 5's were once more at 75 in London.

COMMERCIAL REGULATIONS.

APPRAISAL OF MERCHANDISE.

TREASURY CIRCULAR TOUCHING THE DIFFERENCE OF PRACTICE EXISTING IN THE SEVERAL PORTS RELATIVE TO THE APPRAISEMENT OF MERCHANDISE.

TREASURY DEPARTMENT, December 26, 1848.

DIFFERENCES of practice existing in the several ports relative to the appraisement of merchandise, the following additional instructions are issued for the government of collectors, appraisers, and other officers of the customs, under the 25th section, act of 9th August, 1841, which is in these words:—"That it shall be the duty of all collectors, and other officers of the customs, to execute and carry into effect all instructions of the Secretary of the Treasury, relative to the execution of the revenue laws; and in case any difficulty shall arise as to the true construction or meaning of any part of such revenue laws, the decision of the Secretary of the Treasury shall be conclusive and binding upon all such collectors, and other officers of the customs."

The interests of the country, and of fair and honorable merchants, require that this department should, by every means in its power, secure not only the revenue against loss, but should maintain such merchants in their business against sales of imported articles at diminished rates, arising from fraud or under-valuation.

To appraisers the government looks for correct valuations of foreign imports. On these officers, more than any other, does the success of the *ad valorem* depend. Their responsibilities are great, and it is expected that their efforts will not be relaxed to check every under-valuation or fraud upon the revenue by whomsoever attempted. A strict and faithful performance of their duty, at times necessarily disagreeable to their judgment should have great weight with other officers of the revenue service, and especially with the collectors of ports, who should in all cases render them every aid and co-operation in their power.

The intent of the 17th section of the act of 30th August, 1842, in the appointment of merchant appraisers, is evidently to give the merchants an opportunity to appeal from one class of appraisers to another. But it is clear that Congress did not design to relinquish the power in the government to select the merchant appraisers to whom the case might be referred, nor to give the parties appealing any more voice in the selection of such appraisers than of any other government officers. To consult the parties concerned, or allow them a voice in the selection of merchant appraisers, would soon result in permitting the importers to control the appraisement of their own goods, and it is presumed is not permitted at any port.

Merchant appraisers should be particularly instructed that when acting in that capacity they are to be governed by the same rules and regulations as provided by law for the direction of regular appraisers, and are to act upon the principle that the invoice price, or even the price actually paid for an article of merchandise, is by no means a true criterion of the fair market value as prescribed by law. Adopt a contrary principle, and one who is so fortunate as to have a quantity of merchandise given him, would be entitled to receive it free of duty, or at a nominal duty, if purchased at nominal prices, and different rates would often be assessed by appraisers by articles of the same value. The fair market value intended by law is the general or ruling price of the article "in the principal markets of the country from which the same shall have been imported." The Treasury Circular of August 7th, 1848, declares that forced sales in foreign markets at reduced prices, under extraordinary or peculiar circumstances, cannot be taken as the true market value of such goods.

To secure uniformity of action at the different ports the merchant appraisers are to be selected, and their appraisements made in the following manner:—When the appraisers all concur, they may designate five names, or when such concurrence does not exist, the appraisers making the advance, may designate five names of impartial merchants, citizens of the United States, familiar with the value of merchandise, and of the highest credit for integrity and fair dealing, from whom it is recommended that the collector select two as the merchant appraisers, to act under the law, who shall be duly sworn as provided for in the Treasury instructions of July 6th, 1837, omitting in the oath the name of the importer. In the notice to be sent to the appraisers selected as provided in the same instructions, the name of the importer is also to be omit-

ted. The names of the merchant appraisers selected shall also be withheld from the importers until such appraisers assemble for the performance of their duty, as it is important that no *ex parte* statements be permitted, the sole object being to obtain a fair and disinterested examination and valuation of the merchandise. When the collector has fixed the time and place for the merchant appraisers to assemble, he will notify the importer of such time and place, but not the names of the merchant appraisers. Such importer may be present if he desires, and every proper facility should be given him for a thorough examination and ascertainment of value.

To facilitate collectors in settling their accounts, this re-appraisalment should take place immediately, or at all events, not be delayed beyond six days from the time the re-appraisalment is demanded, unless in the opinion of the merchant appraisers, are extraordinary circumstances requiring an analysis or proof not to be procured within that period. Should such delay extend beyond ten days, a statement of the case by the collector must be forwarded to this Department for its examination. The collector in such cases shall also call on the regular appraisers for a statement, and transmit it to the Department. In all cases where the merchant appraisers assess a lower value than the regular appraisers, the collector will report to the Department a full statement of the case to the recorder here, together with the names of the merchant appraisers. He will also transmit at the same time to this Department, for record here, a statement which he will obtain of the case from the regular appraisers.

In case the merchant appraisers are at variance with each other in their appraisements, and the collector compelled according to law to decide between them, it is expected that he will, without delay, or within five days from the time the re-appraisalment is made, decide the question of value, and if he adopts the lowest appraisement made, he will give the reasons for the same in his statement, to be forwarded to this Department for record as directed above.

This Department earnestly invites the co-operation of collectors, appraisers, and other officers of the customs in enforcing correct valuations, and will also be glad to receive information and assistance from all honorable merchants and citizens who desire to protect the revenue, to guard the rights of the honest trader, and to insure the faithful execution of the laws.

The selection of "merchant appraisers" should not be confined exclusively to those connected with foreign imports, but when the requisite knowledge exists, should be extended so as to embrace domestic manufactures, and producers and other citizens acting as merchants, although not dealing in foreign merchandise.

In all cases where the advance by the regular appraiser is short of the penalty, they shall report to this Department the names of the importer, consignee, and consignor, together with the invoice value, and rate advanced.

The law requiring importers to give notice "forthwith" to the collector of a demand for re-appraisalment, no such re-appraisalment shall take place unless notice is given to the collector in writing of such demand within a period not longer than the day succeeding the notice of such appraisalment, which the regular appraisers shall give in all cases as soon as the appraisalment is made.

In all cases where the goods are advanced by the regular appraisers 20 per cent more than the invoice, and no re-appraisalment is called for, the said appraisers on ascertaining that fact shall report to the collector in writing whether the interests of the government will best be promoted by taking the duty with the penalty, as prescribed by the law, or by taking the duty in kind as authorized by the 18th section of the act of 30th August, 1842, as enforced by the circular of this Department of the 28th November, 1846, and if the appraisers advise the duty to be required in kind, it shall so be taken by the collector. In all such cases, also, when the goods are advanced by the regular appraisers 20 per cent above the invoice value, and a re-appraisalment is made by the merchant appraisers, the collector shall make a statement of the duty thus ascertained and fixed by him, including the penalty, if any, to the regular appraisers, who shall thereupon report in writing to the collector whether it is to the interest of the government to take the duty thus ascertained, or require the duty in kind, and if the regular appraisers advise the duty to be required in kind it shall so be taken by the collector.

In all cases where the duty is taken in kind, it is to be thus assessed under the law according to the several schedules, viz:—If the duty be 100 per cent, the whole of the goods shall be taken; if 40 per cent, two-fifths; if 30 per cent, three-tenths; if 25 per cent, one-quarter; if 20 per cent, one-fifth; if 15 per cent, three-twentieths; if 10 per cent, one-tenth; if 5 per cent, one-twentieth; and the goods so taken in kinds are to be sold as provided in Treasury Circular of 28th November, 1846.

These regulations, while protecting the revenue against fraud or under-valuations, will insure correct invoices, inducing a compliance where necessary with the 8th section of the act of 30th July, 1846, and guard the interests of fair and honorable merchants.

Whenever it is found necessary by the regular appraisers or merchant appraisers to guard against fraud or under-valuation, they will carry into effect the following provisions of the 2d section of the act of 16th August, 1846, declaring that "in appraising all goods at any port of the United States heretofore subjected to specific duties, but upon which *ad valorem* duties are imposed by the act of the 30th July last, entitled 'An act reducing the duty on imports and for other purposes,' reference shall be had to values and invoices of similar goods imported during the last fiscal year, under such general and uniform regulations for the prevention of fraud or under-valuation, as shall be prescribed by the Secretary of the Treasury, as enforced by Circular Instructions of the 11th of November, 1846, and 26th of November, 1846." "This last fiscal year," designated in this section, intended by Congress, was "the last fiscal year" preceding the enactment of that law, which was the fiscal year ending the 30th of June, 1846, to which reference is required by the law to value and invoice, of similar goods when necessary to prevent fraud or under-valuation.

Where goods are advanced in price by appraisement, the estimates of the per centage advance, to ascertain whether the same are liable to the penalty as provided for in the 8th section of the act of 30th of July, 1846, must be made only on the articles so raised in price, and such additional duty and penalty must be so levied and collected. In no case will the advance be estimated on the entire invoice, except where the goods are the same in quality, description, and value, and the same advance of price is made on the whole.

R. J. WALKER, *Sec'y of the Treasury.*

REDUCTION OF RUSSIAN SUGAR DUTIES.

The following is a decision on the sugar question, which has just been issued by the Russian government, ordering a reduction in the duty on yellow sugars of 60 copecks per pood, or 5s. 6d. per cwt:—

ST. PETERSBURGH, January, 1849.

His Majesty having examined the different opinions in the Committee of Ministers about the admission of white and yellow sugars at a reduced duty, has given the following decision:—

1. Having divided the raw sugar imported into St. Petersburg from abroad into two categories, to refer to the former the white sugar, and to the second the yellow and brown sorts.

2. White sugars are to be admitted as hitherto, at a duty of *ro. 3 80 c.* silver per pood, whereas yellows and browns, which will prove similar or inferior to the standard sample, pay only *ro. 3 20 c.* silver, (by way of a trial for three years.) If they are higher than these samples, however, they must pay the duty of whites.

3. This law is to be in force from the navigation of 1849; and to be likewise applied to the yellow sugars remaining then uncleared in the custom-house of the importation of 1848.

4. The standard sample will be fixed by the United Committee of Manufactures and Commerce, and confirmed by the Minister of Finances, and a set of them kept in each of the two, and in the department of foreign trade. The sample fixed upon in this instance of the different qualities received from abroad is the one of a rather darker tint, to be chosen by the committee, and to be confirmed by the Minister of Finances.

5. An attestation on stamp of three exports, named for that purpose, must accompany each parcel of sugar cleared at the custom-house, as belonging to the second category.

6. If sugars declared as yellows are not admitted as such by the exports, they only pay the duty of white sugars, and are not passive of the penalty of $1\frac{1}{2}$ duty levied for the declaring of higher goods as belonging to a lower description.

7. The exports are appointed for one year. Two are chosen out of the merchants and brokers, and one out of the members of the Moscow Economical Society of the Committee of Sugar Refiners.

8. If there is any difference of opinion amongst the exports they refer in writing to the Exchange Committee, which gives its opinion to the custom-house. If the cus-

tom-house, however, does not agree with the same, the case is referred to the department of foreign trade.

9. The remuneration to the exports is 1 cop. silver per pood on the whole importation of sugar.

FURTHER REDUCTION IN THE TARIFF OF MOROCCO.

DEPARTMENT OF STATE, *Washington, February 2, 1892.*

The following information, under date of 8th December last, has been received from Mr. Hyatt, the United States consul for the empire of Morocco.

EXTRACT:—"In my despatch No. 5, of the 20th September, I advised you of a radical reduction in the import duties of this country. I now have the satisfaction of apprizing you that an order has been received from the emperor at the several ports of the empire, reducing the export duties on a number of the staple productions of this country, as follows:—

Beeswax from 160 to 120 ounces per quintal.

Hides from 53 to 36 ounces per quintal.

Washed wool from 72 to 54 ounces per quintal.

Halecah wool from 48 to 36 ounces per quintal.

AMAPALA, ON THE PACIFIC, A FREE PORT.

The government of Honduras has issued a decree constituting the port of Amapala, on Tiger Island, (off the coast of Nicaragua, in about latitude 13° N. and longitude 99° W.) a free port, and the circular of the house of Carlos Dardanos & Co. announcing their establishment in said port as commission merchants, recommending the port as a very convenient stopping place, with safe anchorage for steamers and other vessels bound to California. No duties of any sort are levied in the port of Amapala.

NAUTICAL INTELLIGENCE.

INFORMATION FOR NAVIGATORS.

THE following letter, from M. F. MAURY, Lieutenant United States Navy, at the head of the National Observatory, Washington, contains some new and useful suggestions from the "bold and original mind" of that distinguished officer, that are worthy of the attention of ship-masters and navigators generally. It seems that Lieut. Maury received letters from some two hundred gentlemen of New Bedford and New London, who are either owners or masters of vessels engaged in the whale fishery, expressive of their interest in his undertaking, under the auspices of the general government of the United States, to map the winds and currents of the ocean, and offering to collect the necessary materials therefor. Believing the letter to contain information of great interest to navigators generally, we publish it entire.

NATIONAL OBSERVATORY, *Washington, January 15, 1892.*

To the Owners and Masters of the New Bedford and New London whale ships:

I received the letters which the gentlemen of New Bedford and New London—all "owners or masters of vessels employed in the whale fisheries"—have addressed to me in relation to the "wind and current charts."

I am gratified at the hearty interest, gentlemen, which you take in this work, and am more than pleased by your generous offer to co-operate with ships and men in conducting, under my direction, not only observations in all parts of the ocean with regard to winds and currents, and in the investigation of other phenomena bearing upon navigation, but in collecting also such information as I may desire with regard to the habits of the whale.

These letters afford practical proof, in addition to the evidence we are daily receiving, that our labors here for the benefit of navigators have at last told, and that the

ject of them is now understood, and properly appreciated by those for whose benefit they are especially intended.

I have felt all along that this sooner or later would be the case; for I was sure that I had not mistaken the character of American merchants, ship-owners, and navigators. I have met with them in all parts of the world; and wherever I have been, I have found that the American sea captain, above the shipmasters of all other countries, is renowned for his enterprise and intelligence. Never, since Columbus crossed the Atlantic, has the commercial marine of any nation been conducted by such men. America looks on the world not more in her merchant ships than in her merchant captains; and therefore I expected more from them than from all the world besides.

For years I have been soliciting the co-operation of seafaring people in procuring materials for this undertaking, and for years I solicited in vain. But I knew it was because the object I had in view was not presented in the right way. I must first get my shoulder to the wheel, and then cry help; and then I knew that sailors would help me with a will. Accordingly I made a beginning. I consulted such old log-books of our men-of-war as I could lay hands on, put down the results on a chart; and, as incomplete as that chart is, published it to the world.

Immediately the scales were turned; it was seen then that it was really practicable to make the experience of all navigators available to each one, and the thing was understood at once. Old sea captains unlocked their sea chests, took out their musty sea journals, and placed them at my disposal. Owners and merchants came forward with offers of assistance; and now, instead of my having to solicit co-operation from men, they are soliciting from me the privilege of co-operating with us.

This is as it should be. It has not been a year since the first sheets of this chart were published, and I estimate that not less than one thousand American ships and navigators have been supplied with them, and are now engaged in all parts of the sea, in making observations and collecting materials for the completion of the work.

The history of the world does not afford an example of such another corps of observers, without pay or the promise of reward. A fleet of ships far exceeding in number that which any navy in the world can put to sea, have been enlisted for this work, and are actually engaged in conducting the most extensive system of physical researches that has ever engaged the attention of philosophers. Solomon's exchequer could not be sufficient to support the multitudes of ships and men that, before the end of another year, will probably be engaged in this work; and yet the laborers in this field expect no other reward than that which good and wise men find in the mere act of helping to do good.

We have been reproached by other nations as being backward in the pursuit of science, and deficient in our contributions to the stores of knowledge. Without degrading this charge to be wholly unfounded, or admitting it to be entirely just, the shipping merchants and seamen of America can never hereafter be implicated in it. In my mind, the age in which we live, fruitful as it is, does not present a more sublime moral spectacle than that which is here exhibited. These charts, because they promise to be useful to navigation, have called out a fleet of ships manned by thousands of American seamen, all acting harmoniously together in the investigation of some of the most important and apparently complex phenomena of nature. By means of these charts alone, the mariner has been induced to conduct in every sea, and according to prescribed rules, a series of observations which aim at a more perfect development of the laws of nature, at the advancement of science, the benefit of commerce, and the improvement of navigation.

Several thousand ships engaged hourly, day and night, upon the wide ocean, in recording observations in meteorology and on the phenomena of the great deep, to be sent here for comparison and discussion! What may not be the value of the results! People may talk of merchant princes; but here is something more than princely, undertaken with the spirit of the true Yankee sailor, and conducted in a manner that

"Is as rich with praise as is the ooze and bottom of the sea."

The materials thus sought and collected are those which constitute the experience of the navigator with regard to the winds, the currents, and all that relates to the safe and speedy navigation of the ocean.

Received here, they are placed in the hands of assistants, an able corps of navy officers who have a fellow feeling in the work. They know how to sympathize with the sailor, and therefore fully appreciate the importance and value of the results.

The log of each ship is carefully examined and compared with all the rest; the

winds, the currents, the temperature of water, and all the phenomena observed, are spread out on a chart in such a manner as to show at a glance the result of the whole combined.

As it may be supposed, many important discoveries, many beautiful illustrations of natural laws, and many interesting facts and principles with regard to the navigation of the seas, are elicited as the work progresses. I may be excused for alluding to some of them:—

1. By examining and comparing together many thousand sea journals, a new and better route has been discovered by which the passage from the ports of the United States to the equator—the common highway of all vessels bound to China and the East Indies, to the ports of South America and the islands of the Pacific ocean—is shortened a week or ten days.

2. In the midst of the north Atlantic, a regular monsoon has been discovered, and its limits are already defined with more precision than those of the Gulf stream have even been.

3. The north-east trade winds form an atmospherical band in the north Atlantic, with surprising regularity of breadth. Were this band opaque, or were it visible to an astronomer in the moon, it would appear to him not unlike the belts of Jupiter do to us; but upon a scale greatly enlarged. Could it be seen by an observer in the moon, he could mark our seasons by it; so regularly do the materials already furnished show its vibrations up and down in latitude to be according to our months and seasons.

This band of N. E. trades is not, as has been supposed, parallel to the equator. It is parallel to the ecliptic. The manner in which these conclusions are arrived at admits of no more doubt as to these facts, than there is as to the existence of the trade winds themselves.

When these thousand ships return with their observations, made simultaneously in all parts of the world, who can anticipate the value or the nature of the results to be obtained? When it is blowing a norther in the Gulf, or a tornado in the West Indies, for instance, these observations will enable us to see what it was doing on the other side, across the Isthmus of Tehuantepec.

I am beginning to receive returns from this fleet. Our system of observations requires the water thermometer to be used; and in consequence it is now beginning, for the first time, to be *generally* used in the merchant service. From the returns already received, this instrument indicates a fork in the Gulf Stream, on the banks of Newfoundland. It also indicates the existence of a cold current setting westwardly between two warm ones running towards the east; and it indicates, further, the probability of the Grand Banks extending nearly to the coast of Europe. This is all the thermometer can do in this respect; it can only indicate.

Suppose—and the supposition is probably not far wrong—that the rate of this cold current and of each of those warm ones is one mile the hour; vessels do not know where the dividing line between them is. They lay in the track to Europe; and if we suppose the average time for which a vessel, on her passage to and fro, is exposed to them to be ten days, we shall see that each vessel may be swept back or carried forward by the current to which she is exposed during that time, 240 miles; thus making a difference of 480 miles in her progress during only ten days of her passage, according as she may have the luck to strike the adverse or favorable current. Would it not be a great advantage to every vessel in the European trade, if she knew exactly where to find these currents, and where to go to avoid the adverse one, and where to take the favorable one?

To ascertain their limits is more than individual enterprise can do,—it would require a vessel to be sent there for the purpose, and to employ several months in the examination; therefore this would seem to be the business of government.

Another subject which demands the attention of government is an examination as to the existence and true position of dangerous rocks, reefs, and shoals, which are said to lie in certain frequented parts of the ocean. I have now before me, in an admirably kept log by Captain Walsh, of the "*Silas Richards*," on her late voyage from Baltimore to Rotterdam and back, an account of such a danger. He is one of the *thousand observers*, and this is one of the many interesting points that they are bringing to light. In his remarks of September 5th, 1848, latitude $41^{\circ} 47'$ north, longitude $59^{\circ} 34'$ west, he states: "I firmly believe in the existence of a rock just awash in rough weather, about the size of the hull of a ship of 500 tons. I have not myself seen it, so as to be *certain* that I have, though I think so. But a person in whom I have en-

tire confidence assures me that he plainly had, and that he passed it so near that the kelp growing on the rock he could have caught with a boat-hook had he had one in reach, and nerve at such a time to have used it. It was described by his crew, who at 3 P. M. were double-reefing the ship's (the *Forum* of Boston) fore-topsail. The helm was put up just in time to clear it. *I think I saw it, and I am quite certain that there are soundings about there.*"

It is exactly in the track to and from Europe. It is just below the water's edge, and therefore the more dangerous; for it cannot be seen until you get on it, and it is sure to knock a hole into and sink any vessel that touches it. Who can tell but that the *President* steamship, and many other vessels that have gone down upon that route, were lost upon this rock! One of the small vessels of the navy detached for that purpose would in a few weeks settle the question as to the set of those currents, the extension of the Grand Banks, and the existence and place of this rock.

I have every reason to believe in the discovery of a westerly current in the Gulf of Mexico, which, if it be proved certainly to exist, and then have its course and limits so marked by a public cruiser that vessels may know where to find it, will shorten the average sailing passage from Havana to Pensacola, Mobile, New Orleans, and Texas, at least one-third.

As for your favorite subject, the whales, I am happy to inform you that Lieutenant Herndon has them already in hand; and though his investigations have not yet gone far enough to authorize conclusions, yet there is no doubt in my mind that if you will send us well kept journals, and enough of them, we shall be able to construct a chart which will show at a glance in what part of the ocean the whales have been found in quantity in the different months; and we shall also show the parts that are never frequented by them.

Take as an example: he has examined the logs of vessels which, in the years 1833, '34, '35, '39, '40, '44, '45, and '46, cruised 429 days in the square from 5° N. to the equator, between the meridians of 80° and 85° W. and whales were found there in quantities, in every month except January, February, and March. In the square from 5° N. to the equator, between the meridians of 90° and 95° W., he has in like manner examined the logs of vessels which cruised there in search of whales 190 days in the years 1832, '33, '34, '35, '36, '39, '40, '41, '43, '45, and '46. Some one of these vessels was there in every month of the year, except December; and they saw only a few straggling whales in February and September. It remains to be seen whether this animal revisits annually the same part of the ocean. So far it seems probable that he does not; though it does not appear that he remains in any one part all the year round. What, then, is to regulate his visits from place to place? Probably the abundance of food; therefore, this is a subject to which I would invite particular attention. What is the food of the whale? What localities and what temperature of the water are most favorable to its production? How long does it take to mature? Satisfactory replies to these interrogatories would throw much light upon the subject.

The observations in addition required for this work are the latitude and longitude of the ship, the temperature of the air and water, and the set of the current daily; the variation of the compass as often as it is observed, and the prevailing character of the wind for every eight hours of the twenty-four, stating always the point of the compass whence it blows. Besides this, the mention of whales, large quantities of sea-fowl, drift, tide-rips, discolorations of the water, fogs, rain, thunder and lightning, whenever they occur or are seen, with any other remarks that may be deemed of general interest, should be entered in the journal kept for this office. Care must be taken to note in it, also, the kind of whale, whether right or sperm.

Forms for this journal, with a copy of the wind and current charts, may be had, on application, of Professor William Mitchell, of Nantucket; Captain Daniel McKenzie, New Bedford; Captain R. B. Forbes, Boston; W. L. Havens, Sag Harbor; George Manning, E. & G. W. Blunt, or Eggert and Son, New York; Wm. H. O. Riggs, Philadelphia; Captain Goldsborough, U. S. Navy, Baltimore; or at this office.

By application at any of the above named sources, any navigator will receive a copy of the charts and a copy of the new sailing directions without charge or condition, except that he keep and return to this office an abstract of his journal according to the form prescribed.

Respectfully, &c.

M. F. MAURY, *Lieut. U. S. N.*

DARTMOUTH HARBOR LIGHT.

It has been determined by the Town Council of Dartmouth, that the Harbor Light shall cease to burn on the 31st day of March, 1849.

ADDITIONAL HARBOR LIGHTS AT OSTEND.

The Belgian government has given notice, that at an early period, a fixed light will be established on the extremities of each of the two piers, or jetties, which form the entrance of the port of Ostend. The light on the western pier will be green; twenty-three feet high, and visible at the distance of four or five miles. The light on the eastern pier will be red; of the same elevation as the former. The green light will be shown at sunset, and extinguished at sunrise; but the red light will not be lighted till the flood tide has thrown in at least nine feet of water between the pier-heads, and will be extinguished when the present tide lights are lighted. As soon as the present tide lights are extinguished, during the ebb, the red light will be again shown, and continued till the falling tide has lowered the water between the jetty heads to nine feet, when it will be extinguished. In bad weather, when there can be no communication with the pier-heads, these arrangements must of course be interrupted; and all vessels are cautioned not to attempt the harbor of Ostend when the tide lights are not displayed.

BAY OF FUNDY—BLACK ROCK AND APPLE RIVER LIGHTS.

The Commissioners of Light-houses in Nova Scotia have given notice that two *New Lights* are now established in the Bay of Fundy, namely: one at Black Rock Point, on the south shore of the Mines Channel, and the other at Hetty Point, (called also Cape Capstan,) on the north side of the entrance of Apple River, on the southern shore of Cumberland Bay.

BLACK ROCK FIXED LIGHT.—The Light-house, which is a square building and painted white, stands on Black Rock Point, about the latitude of $45^{\circ} 11'$ north, and three-quarters of a mile to the westward of Kennedy's breakwater, and two miles and a half to the eastward of Giran's breakwater. Small vessels resort to both those places, and the Light will therefore be a useful guide to those vessels bound to them, as well as to Spencer Island Anchorage, or into the basin of Mines. The Light is elevated 45 feet above the level of high water. Spring tides rise and fall there 50 feet.

APPLE RIVER LIGHTS.—Two Fixed Horizontal Lights.—The Light-house stands on Hetty Point, on the northern side of the Apple River, in Cumberland Bay, and about three leagues to the eastward of Cape Chignecto, in about $45^{\circ} 26'$ north latitude. It is a square white building, showing to vessels, approaching it from the westward, two Fixed Lights, placed horizontally. These Lights are 40 feet above the level of the sea at high water. The rise and fall of spring tides there is 55 feet.

WRECK IN THE SHIPWAY.

A green buoy, marked with the word "Wreck," has been placed 15 fathoms to the N. E. of a vessel sunk in the Fairway of vessels passing through the Shipway Channel. The buoy lies in seven fathoms at low water spring tides, with the following compass bearings, namely:—

Buoy of the Rough.....	West
S. W. Shipwreck Buoy.....	S. S. E.
Baudsey Sea Mark.....	N. by W. $\frac{1}{2}$ W.

WRECK ON THE WARP.

A green buoy, marked with the word "Wreck," has been placed 15 fathoms to the westward of a schooner sunk upon the Warp, in six fathoms low water spring tides. The buoy lies with the following mark and compass bearings, namely:—

Prittlewell Church, its apparent width open westward of the first house west of Shorebury Preventive Station.....	N. W. $\frac{1}{2}$ W.
Cant Buoy.....	S. by W.
Nore Light Vessel.....	W. by N.
West Oaze Buoy.....	S. E. by E.

JOURNAL OF MINING AND MANUFACTURES.

MINERAL WEALTH OF THE SOUTH-WESTERN TERRITORY OF THE U. STATES.

LESLIE HUNT, Esq., *Editor of the Merchants' Magazine, etc.*

THE mineral wealth of the newly acquired territories of the United States, offers to reflecting man much material for inquiry. The great opening of a new hemisphere, from all appearances and accounts, bids fair to revolutionise the whole civilized world; the immense resources of the most valuable metals, which are about beginning to develop themselves on the most extensive area ever known before, and the authentic information so far obtained about the vast and inexhaustible supply of that precious metal, gold, must naturally excite great interest in the American citizen, independent of his patriotism or joyful feeling that this present era will form a new epoch in political economy. It is well known that Mexico possesses valuable silver mines, which have produced for many years \$22,000,000 annually, from the East and West; until lately the quantity has been reduced to \$12,000,000 per annum; that they only received about half a million of gold from these mines. Whether the Mexicans do not search for gold, or whether there was another reason for not opening these gold mines, is a matter of inquiry. In the district of Cosalo, in Mexico, there is said to be the richest gold mine in the world, belonging to Signor Triarte, who refused to work any degree of productiveness, because he could not dispose of the immense revenue it would yield, amounting to several millions of dollars. He has now far more than he wants, and says that his money is safest under ground; at all events it is in his country, and extending to New Mexico, where very extensive gold mines are situated about forty miles south of Santa Fe, and where the streets of the village are paved with gold.* In California, at San Fernando, near San Pedro, gold has been dug out several years. No certain calculation can as yet be made in regard to the quantity of gold to be obtained from California; but judging from the great emigration from and other countries, from five to ten millions of dollars worth may be computed to be gathered within the next twelve months.

It is also fully ascertained that quicksilver, as well as gold, abounds. A number of mines have been discovered where whole mountain ranges, near Pueblo de San Juan, and near the town of Sonoma, about 60 miles from the Bay of San Francisco, consist of the cinnabar, which, according to analysis, yields from 15 to 33 per cent of quicksilver; copper is found in considerable quantities likewise, from Santa Fe to San Francisco; lead is abundant on the north side of the entrance of the Bay of San Francisco; sulphur, asphaltum, and coal, have likewise been found on many places near the mouth of the Colorado; several silver mines have been in successful operation for some time on the hills of Catalina, and not far from Monterey.

It is stated by the geologist of the United States Exploring Expedition, that the mountains along the ridge of the Sierra Nevada, and near the Sacramento river, are of a talcaceous slate, and much resembling our gold-bearing rocks of the South. There is no doubt that the volcanic action of the east coast of Mexico must have been contemporaneous with that of the west coast, for we find that the productions correspond either, and that, after the great volcanic revolution of so large an extent of country, the high snowy mountains have been shaken and carried away down to the Sacramento and San Joachim valleys, a vast mass of rocks. During this revolution, the

In Lieut. Abert's Report of the examination of New Mexico, it is stated "that from the portal of the house of Mr. Richard Dailum, the Alcalde of New Mexico, he could see holes dug in the sides of hills of sand, which were the vestiges of the gold diggers. On some places deep wells had been sunk, much of the precious metal. He saw many miserable looking wretches, clothed in rags, with an axe or piece of iron to dig the earth, and some gourds, or horns of the mountain goat, to wash the sand. They sat all day at work, and at evening repair to some tienda, or store, where they exchange their labor for bread and meat."

At Puerto, a village of two hundred and fifty inhabitants, several mines are in operation by a Mr. and Mrs. Campbell, who owns a rich copper mine, as also a gold mine. The same gentleman informed Lieut. Abert that he got from his wells one piece of gold worth \$700, and another time a lump worth \$100. Nearly all the people are constantly at the wells, and drawing up bags of loose sand by means of rudimentary machines. Around little pools, men, women, and children were grouped, intently poring over the sand, and washing the earth in wooden platters or goat horns.

Among the minerals brought from New Mexico by Lieut. Abert were obsidian, rock salt, white gypsum, silicate, gold specimens, copper specimens, quartz with dentritic infiltrations of oxide iron, granite, mica slate, black slate, trap rock, a white clay, &c.

Gulf of California has been formed, as well as the whole peninsula, and rivers and lakes; the precious metals, particularly the gold, has been triturated during the long rolling from the original beds, of many hundred miles distance, into fine dust and spangles, and there is no doubt but that the whole space of the Sierra Nevada, over the Snowy Mountains, and great Sandy Desert, to the Rocky Mountains, will at some future day develop vast treasures of these valuable minerals; and that the supply of both gold and quicksilver, of which there are but mere indications at present, will prove inexhaustible.

Considering the distance from Santa Fe to be about 1,000 miles in a straight line to San Diego, and about 1,500 miles to San Francisco, over a part of the Rocky Mountains, the great Sandy Desert, and thence to the Snowy Mountains, and the rocks, minerals, and metals, according to the various statements of travellers, sufficiently identical, it is quite reasonable to infer that the deposition of all these valuable treasures must have been coeval, and that future generations will have ample room for exploration.

The public journals are discussing the question, What influence this great increase of gold will exercise in commerce, and whether the great surplus of this precious metal will affect the monetary affairs of the world?

There is no doubt that the precious metals must depreciate in their intrinsic value, and the standard of the fineness of the currency in the various countries will have to be raised, say from 21 to 23 carats fine, or about 950; but what is more important for the public benefit, will be the raising of the standard of gold for ornaments. At the present day, ornaments purporting to be gold, are but $\frac{1}{2}$ to $\frac{1}{4}$ gold, the rest copper, so that the ignorant purchaser of jewelry may be imposed upon. In the United States, one manufacturer sells one kind, and another another, of various grades of fineness, which will only be remedied by following the example of Sweden, Austria, and Prussia, where the manufacturers are obliged to have the government stamp put on every article of their manufacture. The consequence will be, that a larger quantity of gold will be consumed in ornaments and jewelry, such as watch cases, watch chains, bracelets, ear rings, bracelets, pencils, &c. It will also lead to consuming the gold for many more articles of luxury, which would otherwise have been made by mere plating over baser metal. Another improvement will be to introduce the gold dollar as a part of the United States currency, which shall be equally fine with the eagle and half eagle.

For the present, however, no calculation can be made what the emergency of the case of any enormous surplus of gold will produce; nor had ever such a case occurred in the history of the world, although the discovery of large amounts of the precious metals in Peru and Siberia, during the last thirty years, have brought similar suggestions to the mind of the political economist.

Suppose I put down California should produce this year instead of \$10,000,000	\$20,000,000	France	26,000,000
The U. States, eastern coast.	5,000,000	Indies	14,000,000
Mexico	12,000,000	Sweden	700,000
Colombia	2,000,000	Denmark	150,000
Peru	3,000,000	Saxony	350,000
Chili	500,000	Prussia	2,000,000
Bolivia	1,500,000	Austria	6,000,000
Brazil	100,000	Spain	500,000
England	8,000,000	Russia	20,000,000
		Total	\$121,800,000

Compare this amount with the population of the world to be at the present day 350,000,000; this would only give 28 cents to each head.

There is no fear of gold getting too plenty, so as to make it less valuable in currency or in luxury; but should platina, quicksilver, diamonds, and other precious stones, be found in the same ratio as gold, and there is no reason to doubt their existence, then it will become a question of importance, whether an abundance of these substances will not affect the appreciation of the value of other luxuries.

Yours, truly,

L. FEUCHTWANGER.

THE CUMBERLAND SEMI-BITUMINOUS COAL REGION.

THE completion of the Chesapeake and Ohio Canal to the town of Cumberland, in Maryland, which (as we learn from a reliable source) will be effected by the first of August next, suggests important considerations touching two of the great public inter-

the United States, the communication between the Atlantic seaboard and the West, and the coal business of Maryland and Virginia; it also brings to mind, in addition, some interesting reminiscences of the past. We do not think it exaggerated to say that this event will probably open a new era in the application of coal to mechanical and perhaps domestic purposes also, and consequently in the coal industry of the country.

In speaking of the interesting *semi-bituminous* coal-field which is now for the first time to be made fully accessible from the Atlantic seaboard, and noticing the great inquiry which has lately been attracting attention as to the sources of the supply of fuel to feed the fires which are to create the great motive power, for years to come, the great motive power of manufactures, on the one hand, and the competition on the other, we must stop for a moment to make a note of an interesting coincidence connected with the work whose early completion is announced.

The canal was projected more than sixty years ago. The plan originated with George Washington. Almost the first great subject that busied his ever active mind, after the Revolution, was internal improvements, and, in particular, a navigable communication between the seaboard and the valley of the West. Nor did he fail to perceive the value of the coal region which would thus be approached. His first message to Congress, the first message to the first Congress, recommended the construction of a canal of this kind to unite the waters of the Ohio with the seaboard.

The Chesapeake and Ohio Canal was not begun until 1828. Since that time the Delaware, the Delaware and Hudson, Morris, and Delaware and Raritan Canals have been constructed. The great anthracite coal trade of Pennsylvania, which now amounts to millions of tons annually, has almost entirely sprung up since that year. Pennsylvania and neighboring States have expended over \$40,000,000 since 1821 in the construction of railroads and canals for the purposes of this trade, almost exclusively. The same enterprising spirit animated the management of the Chesapeake Canal, and the competition would have been announced long before 1849, and as brilliant results as perhaps, have been before now realized as those which have attended the opening of Pennsylvania, whose coal trade has grown from 34,893 tons in 1829, to upwards of 3,200,000 tons in 1848.

While railroad enterprise has overtaken the canal, and the Baltimore and Ohio Railway have completed their track in part along the same route with the canal, as far as Cumberland; and they are preparing to push forward the work beyond that point, and select a route along the north branch of the Potomac, on the Maryland side. When completed, we are informed, within six months, as far as the town of Westport, which is situated on the north branch of the Potomac, about twenty-two miles from Cumberland. A dam and feeder, already built by the Canal Company, furnishes slack-water navigation on the Potomac for about six miles beyond Cumberland; the river is capable of being rendered navigable up to and beyond Westernport at a comparatively small expense. This, the Company have, we learn, already taken effective measures to effect at an early day, having directed their chief engineer to make an immediate survey of the river. During five months in the year, in time of freshets, coal boats can run in a few hours from the Savage river, which enters the Potomac three miles above Westernport, to Cumberland.

Westernport is in the centre of the coal region. Thus, therefore, at about the same time, the great lines of communication with tide-water will be completed, the one terminating at Baltimore, the other at Alexandria and Georgetown. Both the railroad and the canal must look to the coal region for a large proportion of their business; and the proprietors of the coal field, without having incurred any expense in the construction of these necessary lines of communication, will reap all the advantages of a competition between them. The effects of this competition have already begun to show themselves. Within a few days past the Canal Company have, by resolution, lowered the rate of toll to 76 cents per ton, from Cumberland to Alexandria.

The Cumberland coal basin lies in the trough, or valley, formed by the two ridges which the Alleghany range forks as it advances in a north-easterly direction towards Northern Virginia, and, crossing the western part of Maryland, enters Pennsylvania. The valley is about thirty-five miles long and ten wide. Its southern half is formed by the north branch of the Potomac, which, after flowing half way up the valley, receiving the waters of numerous streams, the chief of which are Abram's Spring River and Deep Run, in Virginia, and Three Fork River, Savage River, George's Creek, in Maryland, suddenly turns to the south-east and cuts a way for itself out of the valley, (and, as we may add, cuts a natural canal for the miner into the

valley,) through the east ridge of the range. A similar natural channel and passage is afforded by the Savage, which, in like manner, makes its way through a pass in the West, or Back Bone ridge, cutting through the mountains, as it were, to their roots, in a manner which the piety of the capitalist is tempted to recognize as quite providential.

The country between the ridges is a succession of hills and ravines. At the bottom of the ravines flow the streams, some of which we have mentioned, and which, flowing into the Potomac, drain the whole region. Cropping out on the sides of these hills, and in successive layers, from the bottom to the top, are found beds of coal, iron ore, sandstone, and limestone. The coal beds are from two to seventeen feet in thickness. In order to get at these mineral treasures, there is no necessity of shafts sunk deep into the earth, nor will machinery be required, to pump water from the mines. The region is already *drained to hand*. The coal and iron can be reached by lateral cuts into the hill sides.

The coal field extends through the whole length of the valley, and is, therefore, about thirty-four miles long. Its average breadth is four miles; it contains, therefore, about 140 square miles, or 9,000 acres. The capacity of the basin has been variously estimated. One estimate makes the yield of a portion of the field at fifty thousand tons the acre, of *available coals*, lying above the bed of the Potomac.* "The resources of this region," says Mr. R. C. Taylor, in his *Statistics of Coal*, "are demonstrated to be of a very productive character; surpassed, probably, by none on the eastern margin of the Alleghany mountain range."

The northern half of the field is owned principally by several mining companies. In the southern half, for eight miles along the Potomac, on the Virginia side, the land belongs to the Phoenix Mining and Manufacturing Company, which has been incorporated by the Legislatures of both Virginia and Maryland. Through this tract flow Stoney Creek, Abram's Creek, and Deep Run. On the Maryland side, the Company owns exceedingly valuable tracts at Wilson's Mill and Westport, at the mouth of George's Creek. In all, their lands in the southern half of the Cumberland coal field, lying on the Potomac and its branches, are twenty thousand acres in extent. The coal is probably of equally good quality throughout the entire region; but as the seams run south from Frostberg, and to the centre of the coal-field, they become thicker and richer.

It is the peculiar character of the coal of the Cumberland Region, which gives it, at this juncture, its chief interest. At this juncture, we say, for we seem to be approaching a turning point in the history of steam power; a stage, when the inquiry as to the future supply of fuel, vegetable and mineral, to supply the fires of the steam furnace, which burn higher every day, and the consideration of the comparative value and capacity of the different varieties of coal become matters of no little moment. The value of a large and easily accessible supply of semi-bituminous coal becomes evident from a few obvious considerations.

It is but about twenty years since steam power began to be generally and extensively applied to purposes of locomotion. Now, of the two great uses of the mighty agent, it is difficult to say which is most general and extensive, its use for purposes of manufacture, or of locomotion. Railroads, which twenty years ago were not, now met all Europe and America. It is not more than ten years ago, that ocean steam navigation was shown to be entirely practicable. Now the European marines count their ocean steamers by hundreds. Within three years five or six steam navigation companies have been established in the city of New York, which own already some twenty-five steamships, including several on the stocks. It is some years since it was calculated that steam had added a force to the industrial power of the world, equal to that of sixty millions of men. But we must remember that, while it is steam which produces this wonderful power, it is fire that produces steam. Is there fuel, are there wood and coal enough? If there is need of economy, in view of the consumption by this mighty flame, must not regard be had to the different varieties of coal, and that the proper kind be applied to each of the uses for which it is now in requisition, for domestic purposes, for forges and melting furnaces, for the stationary and for the locomotive steam-engine? Already the consumption of wood on railroad locomotives is causing, even in America, a scarcity and rise of prices near the seaboard. Are even American forests to disappear before the fire? It is a striking fact, that on the Reading Railroad, leading from the anthracite coal district of Pennsylvania to the city of Philadelphia, and used almost solely for carrying that coal to market, some \$400,000 an-

* Report of Professor Ch. U. Shepard, of South Carolina.

gally are spent for wood, for the locomotives! This, if not exactly carrying coals to Lew Castle, looks like forgetting to burn the coals that are there. But the fact is, experiment has shown the difficulty and the disadvantage of using anthracite coal on railroad engines. The reasons will presently appear.

For all locomotive purposes, whether on land or water, the fuel that is capable of generating most steam, within the shortest time, at the shortest notice, and at the same time occupies least space, in bulk, is obviously the most desirable. Such, it is well known, is the peculiar character, the distinguishing excellence of the semi-bituminous coals. In England, this opinion is well established; so much so, that the Welsh semi-bituminous are called, by way of distinction, *steam coals*, and supplies of them are sent to the most distant naval stations in Africa and Asia, for the omnipresent British navy.

The Cumberland and Welsh semi-bituminous coals prove, upon analysis, very similar in the proportions of carbon and volatile, or bituminous and gaseous matter. In his valuable statistics, Mr. Taylor gives a classification and analysis of some thousand varieties of coals, of the three great classes, bituminous, semi-bituminous, and anthracite, into which they are divided. Of the Welsh coals there are contained in those of Dowlais, 79.5 carbon, to 17.5 bituminous matter; Merthyr, 78.4 to 18.8; Pen-y-daran, 16 to 12; Aberdare, 87 to 11.5; and Pembrey, 80.

Of the Cumberland, specimens from Savage river contained 77 carbon to 16 bituminous matter, and 78 to 19; Maryland Company's, 82.01 to 15; George's Creek, 10.75 to 16.03; Stoney river, 83.36 to 13.28; Abram's Creek, 72.40 to 15.20.

The excellence of the Cumberland coal is attested by many men of science. Mr. David Mushet, of Gloucestershire, a few years ago pronounced some specimens from near the town of Cumberland, "the very best bituminous coal he had ever met with." Mr. Ure says that it "resembles closely, in external appearance, the outcross coals of the Monkland and Calder district, or field, near Glasgow, so celebrated for making good iron."

"Professors Silliman, Shepard, and others, have shown," says Mr. Taylor, (Statistics, p. 68,) "that the main, or ten feet Frostberg seam, which, having been longer worked, has conferred a character on the Cumberland coal, contains but 13.34 per cent of bitumen, besides 1.66 of water. Such an amount as 82 per cent of carbon, which these analyses show it to possess, while at the same time it retains enough of the properties of flaming coal, carries its own best commendation, and places it very high, if not the highest, in the scale of American coals."

Being of an intermediate kind between the anthracite and full bituminous, and having more carbon than the latter, and more bitumen than the former, the semi-bituminous possesses a high degree of the good qualities of both, although not so high of either of those of which the others have an excess. It contains those elements in more equal proportions. In anthracite, the average of carbon is from 90 to 95 parts out of 100; in bituminous, 45 to 55 out of 100. For extremely hot fires, like that of charcoal, the anthracite is of course the best. For a fast open-burning fire of little intensity, the English bituminous coals are best. But used for the purposes of the locomotive engine, propelling either ship or car, the anthracite, although possessing ample evaporative powers, is too difficult to kindle for the dispatch and punctuality of travel, and it requires blowers, and a strong draft to keep it burning; the consequence of which is that a large proportion of heat (estimated at 20 per cent) is lost, so that less steam is obtained than from coals of intrinsically less evaporative power. At the same time, the incomplete combustion of this coal, leading to frequent and inconvenient accumulations, which choke the furnaces, and its tendency to clinker, are almost fatal objections to its use, alike on railways and steamers.

On the other hand, the common English bituminous coal, which has heretofore been much used in steamships and are very good, has not a few objectionable qualities. Even the immense volumes of smoke it emits in burning, is a point not to be overlooked, in connection with its use for naval purposes. It is said the French steamships at Calais can be seen at Dover the moment they begin to fire up, and can be watched and followed by their clouds of smoke until night. The smoke of naval battles, in future, will become more thick and blinding than ever, if only the fat bituminous coals are used. The objection would be less, if, instead of only exposing one's movements to the enemy, it blinded foe as well as friend.

The bituminous coal has the advantage of kindling quickly. It burns fast. But its heating power is less than that of the semi-bituminous, of course much less than that of anthracite. A larger bulk of this coal is therefore necessary for the same amount

of evaporative power. The tendency of this coal to run together or cake as it burns, is also not to be overlooked. And instances have occurred of bituminous coal igniting by spontaneous combustion on board of ships. This has been the case with vessels on their way to the East Indies, and a few years ago an English government steamer was burnt in the Mediterranean by the spontaneous combustion of its coal.

In short, for a combination of the highest evaporative power, with the least bulk, facility of ignition, and completeness of combustion, and for the absence of any tendency to clog the furnace, to clinker or to cake, semi-bituminous coals, for purposes of steam locomotion, must have the preference over the other kinds.

We are stating the results of experiments, not theories. Mr. Taylor mentions experiments with the Welsh steam coals, made at the naval dock-yard at Woolwich, England, the results of which proved their superior evaporative power. (*Statistics*, p. 364.) He also mentions the trial of the comparative merits of Liverpool and Cumberland coals, made at sea, 22d October, 1839, on board of the United States steamer Fulton, with similar results.

But by far the most elaborate experiments on this subject, are those conducted under the direction of the naval department at Washington, by Professor Walter R. Johnson, whose elaborate Report of 600 pages lies before us.* The results are given in numerous detailed tabular statements. And at the end are the tables, in which are exhibited the character and efficiency of the several coals. The examination embraced over forty specimens, including various foreign kinds. From the first of these we take the following figures, in which the coals are compared with reference to bulk and space required for stowage, proportion of carbon and volatile matter and evaporative power.

OFFICIAL ANALYSIS OF ANTHRACITE AND BITUMINOUS COAL.

<i>Anthracites.</i>	Weight per cubic foot.	Cubic feet per ton.	Fixed carbon.	Bitumen or volatile matter.	Earthy matter.	Evaporative power.
Peach mountain.....	53.78	41.64	89.00	2.96	6.13	945
Lehigh.....	55.32	40.50	89.15	5.25	5.56	835
Forrest improvement.....	53.66	41.75	90.75	3.07	4.41	940
Lackawanna.....	48.89	45.82	87.74	3.91	6.36	915
<i>Semi-bituminous.</i>						
Neff's Cumberland.....	54.29	41.26	74.73	12.68	10.36	1,000
Maryland Mining Comp'ny	53.70	41.71	73.50	12.31	12.44	914
Blosburgh.....	53.05	42.22	73.11	14.75	10.77	908
Dauphin and Susquehanna	50.54	44.32	74.28	14.75	11.49	....
<i>Bituminous.</i>						
Newcastle.....	50.82	44.08	57.00	35.83	5.40	809
Liverpool.....	47.88	46.74	54.90	39.96	4.62	733
Sidney.....	47.44	47.22	67.56	23.80	5.49	747
Pictou.....	49.25	45.45	60.74	25.93	12.51	792
Richmond, Virginia.....	46.50	48.17	60.30	32.49	8.95	775
Cannelton, Indiana.....	47.65	47.01	58.44	34.00	4.97	686

In the last table the ranks of coals are assigned, according to their practical qualities, in ten different particulars. In respect to completeness of combustion, the second rank is assigned to the Cumberland coal. And it holds the first rank for evaporative power, under equal weights and equal bulks, and for the evaporative power of its pure combustible matter. For freedom from waste in burning, the soft bituminous coals stand first; but some of the Cumberland specimens stand very high, as high as the eleventh of forty-four kinds. And for maximum evaporative power, under given bulks, coal from Cumberland stands first.

At the close of his Report, Mr. Johnson truly remarks, that it is not "easy to assign the exact relative weight or importance of the several qualities indicated. In steam navigation, bulk as well as weight demand attention; and a difference of twenty per cent, which experiment shows to exist between the highest and the lowest average weight of a cubic foot of different coals, assumes a value of no little magnitude."

"For the purposes of steam navigation, therefore, the rank most important to be considered is the fifth, in which the names of coals stand in the order of their evaporative power, under given bulks. This is obviously true, since, if other things be equal, the length of a voyage must depend on the amount of evaporative power afforded by

* Washington, Gales & Seaton, 1844.

the fuel which can be stowed in the bunkers of a steamer, always of limited capacity." (P. 597.)

For the other purposes to which coal is mainly applied, domestic use and manufactures, the Cumberland coal has very valuable qualities to recommend it. We have added, in passing, to the testimony of Dr. Ure, to its value for making iron. Mr. Masbet expresses the same opinion. Professor Daniel says it is "perfectly adapted" to that purpose. When it is recollected that the Cumberland region abounds in iron ore, and in sandstone and limestone, which lie in alternate layers, and in such proximity as almost seems more than the work of chance, it will be perceived what great, and complete facilities for the manufacture of iron it contains, entirely within itself.

As a fuel for domestic purposes, the Cumberland coal has been highly praised. It is a little remarkable, that while in England the only coal used or thought of for fuel, is the soft bituminous, such as the New Castle, in the seaboard States of America, the preference for the anthracite is almost equally exclusive. In neither case is this exclusiveness the result of necessity. In Wales, there is anthracite enough for the whole nation. And the Cumberland region might long since have supplied any demand, had there been facility of communication with the seaboard. Perhaps difference of climate may in part account for this difference between the two countries. There is certainly something in the intensity of anthracite very agreeable during the arctic severity of our midwinter. But in milder weather, and in the spring and fall, what can be pleasanter than a coal, which like the Cumberland, burns with the cheerful blaze of the English kind, but with somewhat more intensity, and without their smoke?

But when we consider its value as steam coal for both railroad and ship, its introduction into the market at the very time when steam communication on land and water is going forward with such rapid strides, is a most favorable circumstance, a happy coincidence. We have been informed by very good authority, that the demand for this coal for the steamers of the port of New York, for the current year, will exceed 100,000 tons.

It is with reason that we hail the event of the opening of a twofold communication with the Cumberland coal field, as one of no little interest to the public, as well as to the stockholders of the companies owning these *placers*, of a mineral wealth more conclusive, more indispensable to the welfare of the nation, than the gold of Sacramento.

GERMAN SILVER.

Few of our readers are probably aware how many applications are now-a-days made of this useful composition. We call it composition, although the majority of the people imagine that it is a metal *sui generis*, but such is not the fact. It is composed of one part of nickel, one part of spelter or zinc, and three parts of copper; but all these substances have to be pure, and be exposed to a great heat before they mix among themselves. The zinc metal, which is of a volatile nature, is put in the pot not until the first two metals are well united together. The refractory nature of nickel, and the difficulty of obtaining the metal free from arsenic, iron and cobalt, are the causes that not unfrequently we see German silver spoons of gold yellow color, while German silver prepared from pure metals will equal in whiteness sterling silver, and will not tarnish. Tea and table spoons, knives and forks, pocket-combs, musical and surgical instruments, firemen's and ship captains' speaking-trumpets, pocket-book clasps, tea sets, lamps, and gun mountings, are now mostly made with German silver. Upwards of 50,000 lbs. of this composition is manufactured in this country annually, for which the nickel is imported from Germany and England. There are but three localities of nickel ore in this country:—an ore from Chatham, in Connecticut, yields about three per cent nickel; another ore from the mine La Motte, in Missouri, yields about 10 per cent nickel; and lately a nickel ore has been discovered among the copper ore on Lake Superior.

German silver was first introduced into the United States by Dr. Feuchtwanger, of New York, who was obliged to pay, on his arrival in this country, the custom-house duties of silver, the inspectors not knowing any difference. He is the first manufacturer of the German silver in the United States, and he is justly entitled to the paternity of this useful composition. He received, in 1834, '35, and '36, silver medals from the American Institute for the crude material, and for his exhibition of over a hundred different useful articles. We regret much that he has not realized that remuneration which his perceptive powers and ingenuity ought to have rewarded him, while other men have realized fortunes, and continued to do so, from the information impart-

ed to them by the knowledge of Dr. Feuchtwanger. In 1837, the Doctor petitioned Congress to grant him permission of issuing \$30,000 worth of pennies made of his composition, as an experiment to substitute the German silver for the copper currency; and Mr. John Quincy Adams in the House, and Mr. Benton of the Senate, spoke in the highest terms of this proposition, and it met with the approbation of the President of the United States, Mr. Van Buren, and the members of both Houses. He failed, nevertheless, in that also, on account of the unfavorable report from the Director of the United States Mint, who stated that the right of coinage belongs to the United States Government, and that it required some skill to analyze the German silver.

COPPER MINES OF MICHIGAN.

It appears, from the annual statement of the Boston and Pittsburgh Mining Company, as furnished to the Michigan State Treasurer, under oath, that the whole amount of capital paid in by the stockholders is \$110,000, on which the company will pay, on the first of July next, the sum of \$1,100 specific State tax. This statement shows that if these mines do not produce gold as easily as those of California, they are quite as certainly rich in wealth, and are much nearer home. By the following extract from a letter of the treasurer, Thomas M. Howe, we now find that the company have declared a dividend of \$10 per share, payable the 21st of May, making the entire dividend of *sixty thousand dollars on one year's labor*, which is a return of six-tenths of the whole capital paid in.

The total expenditures of this company have been.....	\$289,456 87
Total receipts from sales of copper at Baltimore and Pittsburgh.....	209,623 99
Refined ingot copper now on hand at Pittsburgh for sale.....	39,000 00
Copper on the lake shore, and at the mine ready for shipment.....	35,660 96

Making the product of the Cliff Mine \$294,286 95 in two years, or the sum of \$147,143 47 per annum.

THE GOLD MINES OF RUSSIA.

Among the voluminous mass of the Parliamentary papers of last session, will be found a single sheet, entitled, "A return of the Quantity of Gold produced in the empire of Russia." This return was furnished by Sir E. Baynes, the English Consul at St. Petersburg, and was laid before the House of Commons, in consequence of the wish expressed by that body in an address presented to her Majesty. It consists of two pages only, yet, light as it is, when compared with the mighty documents from the midst of which we have just drawn it forth, it contains startling facts, and is suggestive of very weighty considerations.

Our readers are probably aware, that, previously to the discovery of America, Europe was comparatively poor in the precious metals. They may not be equally cognizant of the fact, that the value of gold, as compared with silver, was not so great then as it is now. It has been stated that, in the three centuries which have elapsed since its discovery by Columbus, the New World has, till within the last few years, supplied yearly four times as much gold and about twelve times as much silver as the whole of Europe and Asiatic Russia together. The speedy consequence of such an influx of the precious metals into Europe is, as is well known, a great depreciation in their value, as compared with the value of all other articles, of which the supply did not increase in a like ratio. We find, for instance, that the prices of wheat and similar products were trebled between the year 1570 and the year 1630. Another, but less obvious consequence, was a considerable rise in the value of gold as compared with that of silver. At present, the values of equal weights of gold and silver are in the proportion of 15½ to 1; the total amount of silver in existence being, probably, to that of gold in about the proportion of 40 to 1.

The largest exports of the precious metals from America were from the year 1800 to the year 1810. It was computed by Jacobs that the average yearly supply derived from the New World, was, at the time he wrote, diminished by one-half. We must remember, however, that this decrease is not to be attributed to the supply being exhausted. The real cause of the falling off, is to be found in the war between Spain and her transatlantic dependencies, which commenced in the last mentioned year, and the consequent paralysis of mercantile enterprise, from which they have not yet recovered. Such a diminution of supply is, therefore, clearly temporary; and we may

look forward to the future yearly exports of the precious metals from America, as not only equalling but even exceeding those of the ten years we have mentioned. The energy of our transatlantic kinsfolk—the Normans of the New World—must, sooner or later, be felt through the entire length and breadth of that continent; and the increased production of the precious metals which we anticipate, will be one of its natural consequences. Meanwhile, the total value of the gold and silver annually exported from America has been estimated at about £5,500,000 sterling.

The gold mines of Russia have long been celebrated; but, within the last few years, the quantity of gold produced in that country has increased, with a steadiness and rapidity which is unprecedented. In fact, the increased supply threatens, if it continues, to produce, in a modified degree, an effect similar to that which resulted from the vast influx of the precious metals which followed on the discovery of America. The return before us shows, that the quantity of gold produced in Russia is about four times what it was only ten years since; and the value of the produce, reported to the government, in the year 1846, is estimated at nearly £3,500,000 sterling. This estimate, however, does not adequately represent the value of the gold yearly produced in Russia. Sir Edward Baynes tells us, that the official statements, on which his return is founded, only comprise the produce reported to the government, and that there is reason to believe that considerable quantities have not been declared, partly from peculation, and partly to evade the heavy duties, varying from 12 to 24 per cent, which are levied on the produce of the private mines. We shall not, therefore, be far wrong if we estimate the value of the gold produced in Russia at £4,000,000 sterling per annum, while the total value of gold and silver exported from America is considerably less than £6,000,000, the greater part of that sum arising from the exports of silver. Nor is there reason to suppose that the increased supply is likely to fail. The produce of the Siberian mines has increased year by year, and it is said, moreover, that we may look for an increased supply from the Oural, the produce of which region has, for many years past, been stationary. Sir E. Baynes, in his return, speaking of our prospects in this respect, says: "It is said that new mines have been discovered in the Oural; and the fact of an imperial ukase having lately forbidden the sale of public estates in the region of the auriferous sands of Siberia, justifies the inference, that the government have made successful surveys in that direction, and anticipate a further profitable development of the gold washings which have been so fruitful during the last four years. Under these circumstances, it would seem reasonable to expect an increase of supply, of which, however, it is quite impossible to estimate either the proportion or the continuance."

Vast as is the accumulation of the precious metals already existing, a yearly increment to our store of gold, so much greater than that of former times, must make itself felt in depreciating the value of that metal, and in raising prices, as estimated in gold, although, no doubt, the extent of our already accumulated stock will prevent any rise similar in extent to that which was witnessed at the close of the 16th century. We have said prices as estimated in gold, for a principal effect of the increased supply of gold will be to alter the relative value of gold and silver—in other words, to raise the price of silver, with us a mere article of commerce as estimated in gold, our standard of currency. This is exactly the converse of the change in the scale of metallic values, which, as we have already mentioned, followed on the discovery of America. With reference to the probable extent of such change in relative value, we may here remark, that it was formerly calculated that the quantity of gold produced in America was 1-46th of the silver produced, and that the gold produced in Europe and Asiatic Russia was 1-40th of the silver produced in the same regions. We see, therefore, that on the discovery of America, the supply of both metals was greatly increased, though not in exactly the same proportions; whereas the enormous increase of gold, to which we now call attention, is not accompanied and balanced by any relative increase of silver, or by anything approaching thereto. We must, therefore, anticipate that the change in the relative value of gold and silver will be much more violent than the former converse change to which we have alluded, and we may, consequently, expect to see gold and silver approximate in value more nearly than they did before the discovery of America. Till within a recent period, a large portion of the precious metals, produced by the New World, used to be absorbed by the markets of the East. This is no longer the case. And the absence of such demand will tend to increase the effect produced by the augmented supply of gold. We must also remember that hoarding has, in our own island, been already exterminated by the banking system, which is actively at work, and must sooner or later produce a like result in other countries. Before the

increased supply of gold, which we are now more especially considering, began, the annual supply of the precious metals was more than sufficient to replace the loss created by wear and tear. We may fairly infer, that, in consequence of such annual surplus, the precious metals have always been steadily, but very gradually, depreciating in value—the depreciation being checked by the application, from time to time, of gold and silver to new purposes of art and luxury. Such gradual depreciation of gold must, we repeat, be greatly accelerated by the enormously augmented supplies from Siberia. Speaking roundly, we may say that the total annual supply of gold is doubled by the increased product of the Siberian mines, as it was formerly quintupled by the discovery of America. We shall not here speculate on the possible extent of the change which such an increased supply is calculated to produce in the relative value of gold and silver, nor on the inevitable effect of such a change on our currency and our funded debt.—*London Mining Journal.*

JOURNAL OF BANKING, CURRENCY, AND FINANCE.

THE LAND, PROPERTY, AND TAXES OF NEW YORK STATE.

THE Comptroller's Report furnishes a tabular statement of the aggregate valuations of real and personal estate in each of the several counties of the State of New York, the number of acres of land assessed in each county, the amount of town, county, and State taxes, and the rates of taxation on each dollar of corrected aggregate valuations for the year 1848. From this table we compile the following summary:—

Acres of land in the State of New York, according to Barr's map.....	28,297,143
“ “ taxed.....	27,906,363
Assessed value of real estate.....	\$526,634,883
“ “ personal estate.....	125,663,218
Corrected aggregate valuations.....	651,619,596
Amount of State and county taxes.....	3,985,730
“ town taxes.....	1,809,730
Total taxation of the State.....	5,295,460
Rate of State, county, and town taxes on \$1 valuation, in mills and fractions.....	8.11

Three counties, it appears from the Report of the Comptroller, Essex, Hamilton, and Sullivan, neglected to report, and the valuations and taxes of these counties have been taken from last year. The statement, as compared with 1847, shows an increase of valuation of \$18,919,602, and an increase of taxation of \$451,882, and an average increase in the rate of taxation on each dollar of valuation of .46 of a mill. The highest rate of taxation, according to the table in the Report, is in Albany, and the lowest in Putnam county—the rate of taxation being more than seven times as much in the former as in the latter county.

BANK CAPITAL AND CIRCULATION OF THE STATE OF NEW YORK.

There are in the State of New York seventy-eight incorporated banks, and one hundred and four banking associations and individual banks, showing a total of one hundred and eighty-two banks. The capital of the associations or free banks is as follows:—

Amount of securities deposited with the Comptroller December 1, 1848	\$10,640,183
“ capital of the free banks September 30, 1848.....	14,558,772
Capital of the Safety Fund banks.....	29,616,400
Making a total of.....	\$54,815,355

ill here annex a tabular statement, compiled from the Comptroller's Report, the amount of capital and circulation in each county of the State. Eight it will be seen, embracing Fulton, Hamilton, Queens, Richmond, Rockland, Sullivan, and Wyoming, are without a bank; and the greatest number of in New York, Oneida, Erie, Chautauque, and Jefferson.

IT SHOWING THE NUMBER OF INCORPORATED BANKS, BANKING ASSOCIATIONS, AND INDIVIDUAL THE AMOUNT OF CAPITAL AS REPORTED FOR SEPTEMBER 30TH, 1848; AMOUNT OF SECURITIES IN TRUST; AND CIRCULATION IN EACH COUNTY, DECEMBER THE 1ST, 1848.

No.	Capital of the incorporated banks reported for Sept. 30, 1848. Dollars.	Capital of the Banking Associations and individuals Sept. 30, '48. Dollars.	Amount of securities held in trust for Banking Assn. and indiv. banks Dec. 1, 1848. Dollars.	Total amt of capital and securities of all the banks. Dollars.	Circulation of all the incorporated banks Dec. 1, 1848. Dollars.	Chir. of all the Banks Assns & indiv. banks Dec. 1, 1848. Dollars.	Total amt of circulation of all the banks in each county. Dollars.
.....	1,551,600	611,110	307,327 00	2,470,027 00	1,087,962 40	285,342	1,373,304 40
.....	100,000	5,000	66,000 00	71,000 00	.....	65,475	65,475 00
.....	.....	.....	.....	100,000 00	146,872 00	.....	146,872 00
.....	.....	5,000	105,811 00	110,811 00	.....	105,802	105,802 00
.....	450,000	10,000	50,000 00	510,000 00	447,256 00	50,000	497,256 00
.....	100,000	132,850	545,472 52	778,322 52	149,986 00	534,785	684,771 00
.....	900,000	4,386	67,196 00	271,588 00	199,949 00	65,187	265,136 00
.....	130,000	5,000	93,000 00	218,000 00	160,000 00	93,000	253,000 00
.....	.....	5,000	91,000 00	96,000 00	.....	91,000	91,000 00
.....	150,000	261,050	209,190 00	620,240 00	157,645 00	191,531	349,186 00
.....	.....	90,000	58,319 00	78,319 00	.....	58,318	58,318 00
.....	.....	137,400	134,087 34	271,487 34	.....	111,850	111,850 00
.....	400,000	260,000	327,336 00	987,336 00	400,000 00	302,250	702,250 00
.....	.....	565,005	512,524 00	1,077,529 00	.....	508,737	509,737 00
.....	100,000	25,000	50,000 00	175,000 00	150,000 00	49,995	199,995 00
.....	.....	133,600	85,100 00	218,700 00	.....	85,100	85,100 00
.....							
.....	100,000	251,531	182,082 25	533,613 25	149,862 00	144,785	294,647 00
.....	225,000	190,000	189,023 00	534,023 00	323,024 91	187,735	511,349 91
.....							
.....	900,000	201,300	195,665 10	596,965 10	199,955 00	195,343	395,298 00
.....	400,000	193,969	318,343 39	912,332 39	399,976 00	281,205	681,181 00
.....	600,000	300,000	182,907 00	1,082,907 00	407,971 00	182,907	580,878 00
.....	100,000	102,450	105,650 00	308,100 00	117,912 00	84,650	202,562 00
.....	100,000	150,250	115,228 00	365,478 00	149,859 00	111,612	261,471 00
.....	100,000	.....	.....	100,000 00	149,957 50	.....	149,957 50
.....	700,000	450,000	426,983 37	1,585,983 37	549,869 50	408,079	957,948 50
.....	100,000	204,000	179,798 00	483,798 00	143,350 00	168,937	304,287 00
.....	17,001,300	7,135,022	2,305,397 17	26,441,619 17	8,502,914 59	2,143,793	10,646,707 59
.....	.....	385,000	242,552 00	627,552 00	.....	175,368	175,368 00
.....	1,100,000	815,960	716,277 25	2,632,237 25	924,809 00	683,896	1,608,705 00
.....	300,000	175,750	226,902 86	702,652 86	348,851 00	200,500	549,351 00
.....	900,000	9,900	60,574 09	970,474 09	749,870 00	60,574	810,444 00
.....	445,660	209,300	305,999 00	1,020,959 00	509,988 00	291,730	801,708 00
.....	900,000	73,345	95,182 00	368,527 00	199,998 00	83,500	263,498 00
.....	.....	160,080	180,491 76	349,491 76	.....	188,890	188,890 00
.....	230,000	127,000	127,000 00	474,000 00	309,979 00	127,000	436,979 00
.....	.....	212,600	235,600 00	448,200 00	.....	233,637	233,637 00
.....	1,438,000	157,500	114,020 00	1,709,520 00	1,176,406 00	114,020	1,890,426 00
.....							
.....	100,000	15,000	211,000 00	326,000 00	142,500 00	210,966	353,466 00
.....	100,000	260,540	316,022 00	676,562 00	148,600 00	307,204	455,804 00
.....	315,000	.....	.....	315,000 00	334,305 00	.....	334,305 00
.....							
.....	900,000	.....	.....	900,000 00	198,697 00	.....	198,697 00
.....	150,000	104,500	95,550 00	350,050 00	174,991 00	63,384	238,375 00
.....	.....	18,795	77,815 64	96,610 64	.....	76,692	76,692 00
.....							
.....	900,000	.....	.....	900,000 00	200,000 00	.....	200,000 00
.....	450,000	55,000	108,991 00	613,991 00	430,016 50	107,514	527,530 50
.....	300,000	10,000	151,000 63	461,000 63	349,975 00	149,494	499,469 00
.....	.....	105,000	110,000 00	215,000 00	.....	110,000	110,000 00
.....	100,000	157,600	130,337 00	387,937 00	149,887 00	108,759	258,646 00
.....	.....	90,000	79,270 00	99,270 00	.....	79,270	79,270 00
.....	900,000	126,050	143,157 08	469,207 08	193,266 00	130,996	314,262 00
.....							
.....	100,000	.....	.....	100,000 00	149,982 00	.....	149,982 00
.....							
.....	20,616,400	14,556,773	10,640,182 45	54,813,415 45	20,677,042 40	9,993,762	30,670,804 40

NEW YORK STATE STOCK.

COMPTROLLER'S OFFICE, Albany, February 2, 1848.

The whole amount of State stocks issued and unredeemed is \$23,743,526 80, of which \$6,654,410 are held in foreign countries, and \$16,788,247 36 by citizens of this country, as will more fully appear by reference to the tabular statement herewith annexed.

The Comptroller has been delayed in furnishing this information, because it was necessary to write to the several transfer agencies in New York to obtain it. That for the Hudson and Delaware Company is not received, but he thought he would no longer delay the report on that account. This statement only shows who the holders are, as appears from our books; but he is informed that stocks may be, and often are, held by citizens here in trust for persons residing in Europe, without that fact appearing on the transfer book. All of which is respectfully submitted,

MILLARD FILLMORE, *Comptroller.*

Description of stocks.	Held in foreign countries.	Held in this country.
Canal stocks.....	\$5,954,160	\$10,722,498 91
General fund stocks.....	.....	909,607 00
Comptroller's bonds for loans to treasury.....	20,950	1,369,741 45
Stocks issued to railroad companies.		
New York and Erie.....	308,000	2,692,000 00
Ithaca and Oswego.....	116,300	199,400 00
Canajoharie and Catskill.....	118,000	82,000 00
Auburn and Syracuse.....	102,000	98,000 00
“ Rochester.....	7,000	193,000 00
Tonawanda.....	1,000	99,000 00
Hudson and Berkshire.....	.....	150,000 00
Long Island.....	16,000	84,000 00
Schenectady and Troy.....	10,000	90,000 00
Tioga Coal, Iron, Mining Company, &c.....	1,000	69,000 00
Total.....	\$6,654,410	\$16,788,247 36
		6,654,410 00
Total.....		\$23,442,657 36
Delaware and Hudson Canal, (no statement received from transfer officer).....		300,869 44
		\$23,743,526 80

UNITED STATES TREASURY NOTES.

TREASURY DEPARTMENT, Register's Office, Feb. 1, 1848.

The following is the amount of Treasury Notes now outstanding:—

Amount outstanding of the several issues prior to the act of 22d July, 1846, as per records of this office.....	\$154,389 31
Amount outstanding of the issue of 22d July, 1846, as per records of this office.....	223,900 00
Amount outstanding of the issue of 28th January, 1847, as per records of this office.....	8,419,750 00
Total.....	8,798,039 31
Deduct cancelled notes in the hands of the accounting officers, of which \$10,400 is under the act of 22d July, 1846, \$5,500 under the act of 28th of January, and \$500 under other acts.....	16,400 00
Balance.....	8,781,639 31

DANIEL GRAHAM, *Register of the Treasury.*

COINAGE OF THE UNITED STATES MINT IN 1848.

We published, in the last number of this department of the *Merchants' Magazine*, a complete statistical account, with comprehensive historical notices, of the progress of the United States Mint, and its branches, from its origin, in 1792, to 1847, inclusive, in which we presented the "facts and figures" of the kind and amount of the coins which have been issued from the institution during the whole period of its existence down to 1847, inclusive. From the Annual Report of R. M. Patterson, Esq., the Director of the Mint, recently communicated to Congress, we now proceed to lay before our readers the substance of that Report for 1848, in an abridged form. It appears that the deposits for coinage at the Mint of the United States and branches, during 1848, were as follows:—

At Philadelphia, in gold.....	\$2,780,930
" in silver.....	420,050
" in copper.....	64,158
Total.....	\$3,265,138

[Number of pieces coined, 8,691,444.]

The deposits for coinage amounted to, in gold, \$2,584,460; in silver, \$466,732.

At New Orleans, in gold.....	\$358,500
" in silver.....	1,620,000
Total.....	\$1,978,500

[Number of pieces coined, 3,815,850.]

The deposits for coinage amounted to, in gold, \$188,860; in silver, \$1,659,774.

At Charlotte, North Carolina, the amount received during the year for coinage, in gold, was \$370,799. The coinage amounted to \$384,330—composed of, half eagles 6,472, quarter eagles 16,788.

At Dahlonega, Georgia, the amount received during the year for coinage in gold, was \$274,473; amount coined, \$271,752½—composed in number of, half eagles 47,465, quarter eagles 13,771.

The deposits at the four mints during the year, amounted in all to \$5,539,598.

In gold.....	\$3,413,092
In silver.....	2,126,506
The coinage amounted to—	
In gold.....	\$3,775,512½
In silver.....	2,040,050
In copper.....	64,158
Total.....	\$5,879,720½

MOVEMENT OF THE NEW ORLEANS BANKS.

We give below the official statement of the condition of the New Orleans banks, made up at the office of the Board of Currency, New Orleans, February 1, 1849:—

	SPECIE PAYING.				Liabilities, exclu. of cap'l.	
	Cash liabilities.	Assets.	Circulation.	Specie.	Assets.	Assets.
Bank of Louisiana.....	\$4,159,003	\$6,151,507	\$1,203,442	\$2,546,156	\$4,666,503	\$10,003,954
Commercial Bank.....	3,190,335	4,211,926	1,302,705	1,256,922	3,190,335	7,305,810
City Bank.....	2,375,060	3,338,680	524,710	1,310,460	2,746,797	4,623,785
Louisiana State Bank.....	1,753,343	2,819,739	409,780	704,542	1,753,343	3,559,193
Merchants' and Traders'.....	3,152,164	4,077,297	813,605	1,731,369	3,152,164	5,098,767
Union Bank.....	36,034	697,150	25,995	378,273	96,683	6,942,735
NON-SPECIE PAYING.						
Masses' Bank.....	751,258	220,180	107,317	25,004	7,219,965	7,386,695
Consolidated Bank.....	1,830,196	9,006	1,828,345	5,938	1,635,195	1,463,114
Total.....	\$17,947,303	\$31,534,583	\$6,215,890	\$7,958,677	\$24,660,288	\$45,616,335

FINANCIAL REPORT OF THE CROTON WATER BOARD.

The following statement shows the revenue received and the expenditures since the organization of the Department, from October 5, 1842, to the present time :—

			Receipts.	Expenditures.
October 5, 1842, to May	1, 1843...		\$17,838 67	.....
May	1, 1843, "	1844...	91,790 60	\$233,198 76
"	1844, "	1845...	118,582 74	73,411 78
"	1845, "	1846...	164,532 53	58,433 67
"	1846, "	1847...	194,551 34	53,403 04
"	1847, "	1848...	226,551 83	71,565 74
"	1848, to January 31, 1849...		234,268 79	67,062 47

The expenditures, as above, include the purchase and laying down of main pipe and branches, stopcocks, &c., which belongs to the constructive account, and comprises the principal item in the expenses of the Department.

The following statement shows the rate of Water Tax levied in the city for the several years named, to defray that part of the interest on the Croton Water Department which is not furnished by the receipts from water rents :—

In 1842 it was 20 cents on one hundred dollars.

1843	"	23 38-100	"	"
1844	"	20 94-100	"	"
1845	"	16 47-100	"	"
1846	"	12 70-100	"	"
1847	"	12 60-100	"	"
1848	"	11 90-100	"	"

The following statement shows the quantity of pipes laid, south of the Distributing Reservoir, up to this time :—

36-inch pipe.....	23,650 feet—or	4 miles.....	2,530 feet.
30-inch ".....	6,250 "	1 mile.....	970 "
24-inch ".....	5,400 "	1 ".....	120 "
20-inch ".....	20,675 "	3 miles.....	4,835 "
16-inch ".....	13,125 "	2 ".....	2,565 "
12-inch ".....	217,075 "	41 ".....	595 "
10-inch ".....	5,875 "	1 mile.....	595 "
6-inch ".....	661,150 "	125 miles.....	1,150 "

Or, of all sizes, 180 miles, and 2,800 feet.

SPLITTING A BANK OF ENGLAND NOTE.

It is stated in the *London Globe*, that the Governor and Directors of the Bank of England, having been informed of the extraordinary ingenuity of Mr. Baldwin, that he was able to split not only a newspaper, but a banknote, sent for him, in order to test his skill. That his task might be as difficult as possible, they picked him one of the old £1 notes, which are printed on paper much thinner than the notes of the present day, and told him to split it if he could. Mr. Baldwin took the note with him, and returned it the next day, in the state he had promised. The paper, not in the slightest degree torn, and seemed as though it had but just come from the manufactory, so little was its appearance affected by the operation. The directors remunerated Mr. Baldwin for his trouble, but could not elicit from him the means employed. The discovery is considered of much importance in connection with the paper currency of the country.

THE UNITED STATES LOAN OF 1848.

TREASURY DEPARTMENT, February 7, 1849

The means of the government being ample to liquidate all claims against it up to the 1st of April next, without calling in, before that date, any further payments on account of the loan of 1848, and desiring to save all unnecessary interest, notice hereby given to all the successful bidders for that loan, by whom any balance is due, that they are permitted to postpone any further payments until the 1st of April next.

R. J. WALKER, Sec'y of the Treasury

COMMERCIAL STATISTICS.

UNITED STATES WAREHOUSED IMPORTS.

we below a tabular statement exhibiting the value of merchandise remaining in warehouses of Boston, New York, Philadelphia, Baltimore, New Orleans, Charleston, &c., on the 30th of June, 1848, and the duties which accrued thereon, from a report of the Register of the United States Treasury Department:—

IT EXHIBITING THE VALUE OF MERCHANDISE REMAINING IN WAREHOUSE ON THE 30TH JUNE, 1848, AND THE DUTIES WHICH ACCRUED THEREON.

	Total value.	Rate of duty, per cent.	Duties.
er, beer, &c.....	\$2,220	30	\$666 00
f.....	2,200	20	440 00
.....	602	10	60 20
.....	2,096	20	419 20
.....	1,129	30	338 70
.....	2,940	10	294 00
.....	653	30	195 90
.....	4,116	30	1,234 80
anilla and Tongva.....	7,737	20	1,547 40
.....	1,450	20	290 00
lined.....	2,479	25	619 75
.....	3,128	10	312 80
.....	1,435	15	215 25
.....	1,533	30	459 90
uffs.....	1,032	5	51 60
ufactures of.....	4,811	30	1,443 30
olds.....	10,945	25	2,736 25
.....	1,511	30	453 30
.....	20,226	20	4,045 20
ware.....	967	30	290 10
.....	7,432	25	1,858 00
.....	1,889	20	277 80
ready made.....	4,618	30	1,385 40
.....	1,510	10	151 00
.....	4,769	30	1,430 70
.....	1,922	30	576 60
colored and white.....	721,146	25	180,286 50
ds, gimps, tamboured, &c.....	3,594	30	1,078 20
rwls.....	4,683	30	1,404 90
d worsted goods.....	7,551	30	2,265 30
“ shawls.....	10,056	30	3,016 80
d merino hosiery.....	1,265	30	379 50
d worsted goods.....	124,198	25	31,049 50
d linen goods.....	20,804	25	5,201 00
d silk goods.....	1,303	25	325 75
rets.....	21,368	20	4,273 60
ery, gloves, &c.....	24,186	20	4,837 20
st thread, &c.....	55,191	25	13,797 75
tions.....	786	20	157 20
d.....	548	5	27 40
.....	844	10	84 40
.....	4,601	20	920 20
.....	6,789	10	678 90
.....	4,785	20	959 00
b.....	1,363	10	136 30
re.....	47,050	30	14,115 00

VALUE OF MERCHANDISE REMAINING IN WAREHOUSE—CONTINUED.

	Total value.	Rate of duty, per cent.
Fish, dried or smoked.....	\$1,208	20
“ salmon, pickled.....	5,111	20
“ mackerel.....	6,983	20
“ all other.....	2,316	20
Fire arms, muskets.....	2,319	30
“ fowling pieces.....	992	30
Flax, unmanufactured.....	4,547	15
“ manufactures of linens.....	417,053	20
Flowers and feathers, artificial.....	2,109	20
Flour.....	5,533	20
Fruits, almonds.....	13,813	40
“ raisins.....	27,491	40
Furs, undressed on the skin.....	795	10
“ dressed on the skin.....	736	20
Fustic.....	2,579	5
Glass ware, cut, not specified.....	989	40
“ plain, “.....	7,597	30
Glue.....	594	20
Grass cloth.....	2,112	25
Gum Arabic.....	3,270	10
“ not specified.....	2,597	20
“ copal.....	10,539	20
Gummy bags.....	8,160	20
Hemp, unmanufactured.....	49,438	30
“ manufactures of.....	6,299	20
“ bags and bagging.....	11,089	20
“ sail duck.....	42,552	20
“ raven's duck.....	8,745	20
“ cordage.....	19,636	25
“ hempen yarn.....	39,068	20
Hair.....	12,512	10
Hats, caps, and bonnets of straw.....	7,014	30
Hides, raw.....	67,261	5
Honey.....	6,096	30
Horns.....	676	5
Iron and steel, manufactures of.....	70,812	30
“ cutlery.....	8,968	30
“ needles.....	2,870	20
“ anvils, &c.....	4,983	30
“ hoop iron.....	8,951	30
“ sheet iron.....	79,595	30
“ chain cables.....	6,819	30
“ wire, iron and steel.....	1,765	30
“ nails, hammers, vices, & steel pens.....	632	30
Iron, bar and bolt, railroad, &c.....	387,495	30
“ pig.....	5,860	30
Indigo and indigo paste.....	55,891	10
Jewelry.....	13,786	30
Lac dye.....	1,011	5
Leather, and manufactures of.....	1,275	30
“ kid gloves.....	2,593	30
Lead pencils.....	695	30
Liquorice, paste and root.....	27,602	20
Logwood.....	5,770	5
“ extract of.....	613	20
Looking-glass plates.....	28,556	30
Manilla grass.....	12,443	25
Medicinal preparations.....	1,880	30
Metal, manufactures of.....	1,491	30
Mohair.....	13,752	25

VALUE OF MERCHANDISE REMAINING IN WAREHOUSE—CONTINUED.

	Total value.	Rate of duty, per cent.	Duties.
.....	\$457,500	30	\$137,250 00
struments.....	8,589	20	1,717 80
ed.....	1,826	20	365 20
.....	3,264	30	979 20
stial.....	4,196	30	1,258 80
.....	1,448	30	434 40
.....	7,759	10	775 90
and floor cloth.....	1,754	30	526 20
.....	582	30	174 60
.....	4,918	20	983 60
reen and other.....	2,249	20	449 80
sting.....	3,895	30	1,168 50
nging.....	1,982	20	396 40
y.....	771	30	231 30
.....	5,185	20	1,037 00
prussiate of.....	3,274	20	654 80
sulphate of.....	4,081	20	816 20
all kinds.....	2,023	5	101 15
.....	659	20	131 80
India, shoes of.....	8,376	30	2,512 80
, common tinned, &c.....	3,390	20	678 00
brass.....	844	30	253 20
.....	1,078	20	215 60
.....	4,234	10	423 40
.....	2,864	40	1,145 60
y.....	739	20	147 80
se goods.....	486,726	25	121,681 50
h, veils, shawls, &c.....	32,146	30	9,643 80
.....	694	30	208 20
rellas and parasols.....	1,825	30	547 50
rape shawls and scarfs.....	50,063	30	15,018 90
.....	5,062	15	759 30
otton goods.....	37,278	25	9,319 50
worsted goods.....	102,721	25	25,680 25
worsted shawl.....	29,192	30	8,757 60
otton shawls.....	4,128	30	1,238 40
ags.....	14,715	30	4,414 50
.....	741	25	185 25
.....	1,691	30	507 30
.....	1,672	20	334 40
.....	943	20	188 60
ace.....	10,285	40	4,114 00
tinings.....	56,253	40	22,501 20
namon.....	4,943	30	1,482 90
oves.....	2,680	40	1,072 00
pper, black.....	32,847	30	9,854 10
pper, red.....	1,281	30	384 30
mento.....	4,630	40	1,852 00
asia.....	634	40	253 60
nger, in root.....	3,858	40	1,543 20
andy.....	185,749	100	185,749 00
.....	66,473	100	66,473 00
m.....	77,820	100	77,820 00
shkey.....	5,220	100	5,220 00
rdial.....	3,535	100	3,535 00
h, shear, and German.....	6,742	15	1,011 30
ther.....	1,666	20	333 20
its, braids, flats, &c.....	67,935	30	20,380 50
sp, dressed.....	2,307	39	692 10
ny, ".....	1,533	20	306 60

VALUE OF MERCHANDISE REMAINING IN WAREHOUSE—CONTINUED.

	Total value.	Rate of duty, per cent.	Duties.
Sugar, brown and white, clayed.....	\$489,335	30	\$131,800
Tin, in plates.....	1,690	15	253
Tobacco, in leaf.....	30,330	30	9,099
“ cigars.....	90,799	40	36,319
Toys.....	2,322	30	696
Watches, gold and silver.....	9,244	10	924
Wheat.....	9,787	20	1,957
White lead.....	1,278	30	383
Wine in casks and bottles.....	207,846	40	83,138
Wood, manufactures of.....	1,357	30	407
“ mahogany and cedar.....	23,288	20	4,657
Wool, unmanufactured.....	108,817	30	32,645
Woollens, cloths, &c.....	430,972	30	129,291
“ baize and flannels.....	1,770	25	443
“ blankets.....	41,037	20	8,207
“ listings.....	37,472	20	7,494
“ carpeting.....	22,285	30	6,685
“ carpet-binding and bags.....	1,313	25	328
“ hosiery, woollen, and worsted.....	5,935	30	1,780
“ worsted goods.....	180,542	25	45,135
“ worsted and woollen shawls.....	36,408	30	10,923
“ worsted yarn.....	7,154	25	2,788
Zinc, in sheets.....	31,526	15	4,728
“ sulphate of, or white vitriol.....	1,112	20	223
“ manufactures of.....	1,363	30	408
Articles not exceeding in value \$500 each.....	11,027	..	2,940
Total dollars.....	\$6,272,275	..	\$1,936,444

FOREIGN IMPORTS OF BOSTON IN 1848.

The Boston Traveller gives the following statement of Custom-House imports and duties of that port for 1847 and 1848:—

Value of dutiable merchandise imported at this port for 1847....	\$23,846,076 00
“ “ “ “ “ “ 1848....	21,153,335 00
Decrease of 1848.....	\$2,692,741 00
Value of free merchandise imported at this port for 1847....	\$2,236,947 00
“ “ “ “ “ “ 1848.....	1,662,167 00
Decrease of 1848.....	\$574,780 00
Amount of specie imported in 1847.....	\$12,480,920 00
“ “ “ “ “ “ 1848.....	241,029 00
Decrease of 1848.....	\$12,239,891 00
Amount of duty paid on foreign merchandise for 1847.....	\$4,448,361 83

It will be seen by the above, that there is a falling off all around in 1848, especially in the item of specie. The year 1847 was one of famine in England. The specie came over in payment of breadstuffs, and as the English steamers did not then run to New York, nearly all of it was entered at Boston, though much of it belonged to New York, Philadelphia, &c.

The following statement will show the amount of merchandise deposited in the warehouses in the Boston Collection District during the years 1847 and 1848:—

In 1847..... \$3,305,619 | In 1848..... \$6,177,566

PRICE OF BAR IRON IN LIVERPOOL FROM 1817 TO 1849.

the following statement of the *selling* price of merchant bar iron in Liverpool has been prepared with very great care, and shows some of the most remarkable facts in the history of trade.

At the introduction of railways into general use, railway bars, at first, commanded a price varying from £1 10s. to £2 per ton. During a few past years, ordinary rails have been furnished at a shade only below the quotation price of merchant bar.

	Per ton.		Per ton.
7—February.....	£8 10	1837—February.....	£10 5
March.....	9 10	March.....	9 15
July.....	10 10	May.....	9 00
August.....	12 00	June.....	8 10
October.....	13 00	July.....	7 5
18—February.....	12 15	August.....	6 15
April.....	11 15	“ 15.....	7 5
May.....	11 5	“ 19.....	8 00
June.....	10 15	“ 31.....	8 15
August.....	10 00	September.....	9 10
September.....	11 10	December.....	9 15
December.....	12 10	1838—January.....	9 10
19—May.....	11 10	December.....	9 15
June.....	11 00	1839—January.....	10 5
20—March.....	10 10	May.....	10 00
June.....	9 10	June.....	9 15
21—“.....	9 00	September.....	9 10
22—“.....	8 10	1840—January.....	9 00
23—“.....	8 00	December.....	8 00
24—January.....	8 15	1841—April.....	7 15
July.....	9 15	1842—January.....	6 10
September.....	10 00	December.....	5 5
October.....	11 00	1843—April.....	5 00
“.....	13 10	June.....	4 10
“.....	10 00	1844—January.....	4 15
November.....	12 10	March.....	4 15
December.....	13 00	April.....	5 5
25—January.....	14 00	August.....	5 15
February.....	15 00	October.....	5 15
March.....	14 10	December.....	5 15
April.....	14 00	1845—February.....	8 00
August.....	13 00	March.....	10 10
“.....	12 10	April.....	9 10
September.....	11 10	May.....	9 10
6—January.....	11 00	July.....	8 10
April.....	10 10	1846—April.....	9 00
May.....	9 10	August.....	9 00
October.....	10 00	November.....	11 00
7—March.....	9 10	1847—January.....	10 10
8—“.....	8 00	April.....	9 10
9—“.....	7 00	July.....	9 15
10—“.....	6 00	August.....	9 8
11—“.....	6 00	December.....	8 5
12—“.....	5 10	1848—January 4.....	8 00
13—February.....	6 5	“ 28.....	7 00
September.....	7 00	February 25.....	7 15
October.....	7 10	March.....	7 00
November.....	8 00	April.....	6 15
14—December.....	8 5	May.....	6 5
January.....	10 10	June.....	6 00
April.....	11 10	October.....	5 10
July.....	11 5	November.....	5 5
October.....	11 00	December.....	4 15
November.....	10 15	1849—January 15.....	5 5
December.....	10 10		

IMPORTATION OF ADULTERATED DRUGS.

In the Merchants' Magazine for September, 1848, (vol. xix., p. 326,) we published entire the act of Congress, passed in June, 1848, to prevent the Importation of Adulterated and Spurious Drugs and Medicines. The following statement is derived from the report of Dr. T. O. Edwards, one of the special examiners, appointed for that purpose by the Secretary of the Treasury. The report was of course made to that functionary.

"In answer to the question, What articles of drugs, medicines, &c., have you rejected in what quantities? and whence were they imported? the examiner at New York reports that he rejected—

July	19,	6,650 lbs. rhubarb root, from Canton.
"	21,	931 lbs. opium, from Marseilles.
August	10,	750 lbs. opium, from Marseilles.
"	11,	2,940 lbs. jalap root, from Tampico.
"	31,	2,249 lbs. rhubarb root, from London.
September	1,	645 lbs. rhubarb root, from London.
"	5,	1,414 lbs. gum gamboge, from London.
"	8,	545 lbs. rhubarb root, from Hamburg.
"	9,	1,400 lbs. senna, from Leghorn.
"	19,	2,900 lbs. spurious yellow bark, from Bordeaux.
"	20,	878 lbs. rhubarb root, from Canton.
"	22,	758 lbs. opium, from London.
"	25,	1,783 oz. iodine, from London.
"	26,	1,075 lbs. rhubarb root, from Marseilles.
"	26,	875 lbs. jalap root, from Vera Cruz.
"	29,	3,400 lbs. jalap root, from Vera Cruz.
October	23,	788 lbs. rhubarb root, from London.
"	23,	227 lbs. gum myrrh, from London.
"	25,	13,120 lbs. spurious yellow bark, from Marseilles.
"	26,	1,875 lbs. spurious yellow bark, from Bordeaux.
November	11,	412 lbs. gum myrrh, from London.
"	27,	1,280 oz. iodine, from London.
"	28,	860 lbs. opium, from Smyrna.
"	30,	185 lbs. rhubarb root, from London.
December	5,	156 lbs. opium, from London.
"	5,	1,065 lbs. gum myrrh, from London.
"	23,	12,800 lbs. spurious cinchona bark, from Carthage.

"The opium, gum, myrrh, gum gamboge, iodine, and senna, were greatly adulterated, and (with the exception of the iodine) were also deteriorated by age and other causes. A considerable portion of the rhubarb root was in a deteriorated and decayed condition from age, and the remainder had been exhausted of its active properties for the purpose of making extracts. Much of the jalap root was of the spurious or bastard varieties, mixed with a small proportion of the genuine root.

"The spurious yellow bark was in its natural state, but being of those bastard varieties of cinchona that afford no *quinine*, and very little, if any, *cinchonine*, it is worthless for medicinal purposes. It has, heretofore, from its low price, (\$4 per 100 lbs.) been imported, powdered, and not only extensively used in the adulteration of the genuine (*cinchona cordifolia*) yellow bark, but sold in large quantities to the unsuspecting for the genuine article."

BRITISH EXPORTS OF COTTON GOODS.

Burn's Commercial Glance, for the last five years, has just appeared, exhibiting the quantity of yarn and cotton goods exported during the years 1844, 1845, 1846, 1847, and 1848. The exports of yarn during the year 1848 were 127,121,446 lbs.; showing an increase over the export of 1847 of 10,608,572 lbs. The export of 1847, however, was the smallest since 1841. The chief sources of the increase are in the exports to Denmark, (which were 888,000 lbs. in 1847, and 1,636,000 lbs. in 1848,) Holland, (the increase exceeding 2½ million lbs.,) and Malta and the Ionian Islands, (where the increase has been 1,100,000 lbs.;) Naples and Sicily, (increase 2,100,000 lbs.,) Sardinia.

Tuscany, &c., (increase 2,800,000 lbs.) and Turkey and the Levant, (increase upwards of four million lbs.) There is a large decrease observable in the exports to the Hanse Towns and to India. Of plain calicoes the exports were 566,199,538 yards in 1848; being an increase of 108,154,856 yards over the export of 1847. The chief sources of this increase are the exports to Buenos Ayres and Monte Video, Egypt, Gibraltar, (where the increase is 13 million yards,) India, (increase 20 million yards,) China, Portugal, and Madeira, (increase 17 million yards,) and the Levant, &c. The United States, which took 41½ million yards of us in 1847, had less than 17 million yards in 1848; but they now ship from this country direct for China, &c. Of printed and dyed calicoes the total export, in 1848, was 301½ million yards; being an increase of 14½ million yards over the export of 1847.

NEW YORK EXPORT AND IMPORT OF NAVAL STORES.

We give below a statement of the exports and imports of naval stores at the port of New York for the year ending the 1st of January, 1849:—

IMPORTATIONS OF NAVAL STORES AT NEW YORK FROM JANUARY, 1848, TO JANUARY, 1849.

	Turpentine.	Tar.	Rosin.	Spirits turpentine.
January.....	7,468	1,044	9,477	4,306
February.....	14,842	3,090	15,345	7,130
March.....	13,381	3,783	10,074	5,443
April.....	30,206	8,379	26,469	7,450
May.....	7,479	2,890	23,385	3,793
June.....	11,365	2,859	17,348	3,083
July.....	18,520	1,222	9,596	5,048
August.....	19,506	4,054	12,532	3,402
September.....	25,293	4,561	15,968	6,485
October.....	27,623	2,789	12,290	4,625
November.....	18,920	4,438	9,726	4,116
December.....	9,423	2,031	9,674	2,414
Total.....	204,015	41,140	171,884	57,295

SUNDRIES.

Turpentine.....hhds.	109	Tar.....half bbls.	31
Spirits of turpentine.....	162	Pitch.....bbls.	3,160
" ".....pipe	1	Rosin (in bulk).....tons	175
" ".....trca.	55	Rosin oil.....bbls.	75
" ".....half bbls.	21		

EXPORT OF NAVAL STORES FROM THE PORT OF NEW YORK TO THE FOLLOWING PORTS FOR THE YEAR 1848.

	Turpentine. Bbls.	Tar. Bbls.	Rosin. Bbls.	Spirits turpentine Gals.
To Liverpool.....	51,045	14,442	16,854	72,577
London.....	89,549	485	7,780	97,753
Scotland.....		4,923		9,412
Other ports in Great Britain....	12,128	50	6,629	9,530
Ireland.....		62	6,169	
North of Europe.....	5,499	4	33,425	123,389
France.....		50	4,559	30

IMPORTS AND EXPORTS BY AMERICAN STEAMSHIPS.

The Collector of the port of New York furnishes the following statement of the value of merchandise imported and exported on board the steamships Washington and Hermann, at the port of New York:—

	IMPORTS.	Free.	Dutiable.
Per Washington, from July 31, 1847, to November 6, 1848...		\$9,735	\$2,093,618
Per Hermann, from May 23, 1848, to October 5, 1848.....		23,978	938,423
	EXPORTS.	Domestic.	Foreign.
Per Washington, from September 22, 1847, to Nov. 19, 1848..		\$82,259	\$24,847
Per Hermann, from March 20, 1848, to October 19, 1848.....		35,161	2,315

IMPORT OF IRON UNDER THE TARIFFS OF 1842 AND 1846.

The Secretary of the Treasury, according to instructions, sent to the House of Representatives a return showing the different kinds and value of articles of iron imported, and duties received, since the enactment of the tariff of 1842, of which the following is a summary:—

STATEMENT SHOWING THE VALUE OF IRON, AND MANUFACTURES OF IRON AND STEEL IMPORTED UNDER THE TARIFFS OF 1842 AND 1846, AND THE GROSS AMOUNT OF DUTIES RECEIVED THEREON.

	Val. of art's paying ad val. duties.	Val. of art's paying specific duties.	Total imports.	Gross amount of duties received.
From— 1st Oct., 1842, to June 30, 1843....	\$734,737	\$1,161,121	\$1,903,858	\$902,054 84
For year ending June 30, 1844....	2,782,187	2,445,365	5,227,502	2,477,342 35
“ “ “ 1845....	4,169,745	4,125,121	8,294,866	3,672,141 66
“ “ “ 1846....	4,069,829	3,750,599	7,820,428	2,868,787 65
From July 1, 1846, to Nov. 30, 1846	1,796,428	1,315,397	3,111,825	1,050,579 54
Total.....	13,552,876	12,805,603	26,358,479	10,970,906 00
UNDER THE TARIFF OF 1846.				
	Val. of art's pay'g ad val. duties.	Total imports.	Gross amount of duties rec'd.	
From Dec. 1, 1846, to June 30, 1847..	\$5,669,427	\$5,669,427	\$1,690,511 40	
For the year ending June, 1848.....	12,526,854	12,726,854	3,736,223 20	
Total.....	\$18,196,281	\$18,196,281	\$5,426,734 60	

RAILROAD, CANAL, AND STEAMBOAT STATISTICS.**WESTERN RAILROAD CORPORATION.**

THE Report of the Directors of this Company for the past year, makes a most favorable exhibit of its condition and of the success of the road. The whole amount of receipts from passengers, freights, mails, rents, &c., was \$1,332,068 29, being an excess of \$6,732 23 over that of the previous year, when an unusual combination of circumstances had tended greatly to increase the business of the road. It is a fact which demonstrates the increasing importance of the road, and which must give confidence in the value of its stock. The total amount of expenses for the past year were \$652,357 11, leaving as nett earning, \$679,711 18. From this was paid for interest on loans \$266,380 77, and two dividends on stock of 4½ per cent each, amounting to \$366,000. This leaves as a surplus \$47,330 41, which, added to the surplus of November 30th, 1848, gives the sum total of \$233,134 18. From this is to be deducted \$45,833 34, the payment to the Sinking Funds, required for eleven-twelfths of \$60,000, January 1, 1847, which leaves as an available contingent fund \$187,300 84. During the year, a considerable sum has been expended on substantial repairs for the improvement of the road, which is part of the current expenses. In this period, also, all the bridges between Worcester and Springfield have been raised sufficiently high to clear the heads of persons standing upon the trains, which has prevented a numerous class of accidents, formerly occurring upon the road. About thirty-two miles of second track have been constructed, with a heavy rail, weighing 70 lbs. to the yard. Nine miles more only are required to be constructed to complete an entire second track from Worcester to Springfield. In the report is a table, showing how the stock of the Corporation is held. There are in all 51,500 shares. The Commonwealth of Massachusetts holds of these 11,004; the Massachusetts Sinking Fund, 210; Massachusetts School Fund, 550. The remaining 39,736 shares are held by corporations and individuals, and distributed among 2,780 stockholders, 1,953 holding from 1 to 10 shares, and only 42 holding over 100. This is a diffusion, that shows there is a wide and extended interest in the road, aside from that growing out of the general benefit which the public derives from it.

NEW YORK AND ERIE RAILROAD.

has been completed to Binghamton, a distance of 224 miles from the York, and 200 from Piermont, on the Hudson, where it commences. The ble exhibits the places through which it passes, the distances, rates of fare,

ND RAILROAD ROUTE FROM NEW YORK TO BINGHAMTON, BROOME COUNTY, NEW YORK, VIA NEW YORK AND ERIE RAILROAD.

	Stopping places.	Miles.	From New York.	From Bingham'tn.	Fare from New York.
aving.	New York.....	..	..	224	....
k leaves	Piermont.....	24	24	200	\$0 25
k daily,	Blauveltville.....	4	28	196	0 30
cepted	Clarkstown.....	5	33	191	0 35
Duane-	Spring Valley.....	3	36	188	0 40
ermont,	Monsey.....	1	37	187	0 45
8 A. M.	Suffern.....	5	42	182	0 60
ain runs	Ramapo station*....	3	45	179	0 65
rvis, the	Sloatsburg.....	2	47	177	0 70
ain runs	Monroe works.....	5	52	172	0 85
o Bing-	Turner.....	5	57	167	0 95
	Monroe.....	3	60	164	1 00
	Oxford.....	2	62	162	1 00
1 leaves	Chester*.....	3	65	159	1 05
at 4 P.	Goshen*.....	5	70	154	1 15
undays	New Hampton.....	4	74	150	1 20
Leaves	South Middletown*..	3	77	147	1 25
on at 7	Otisville.....	9	86	138	1 50
	Port Jervis*.....	12	98	126	1 75
	Pond Eddy, Pa.*....	11	109	115	2 00
	Barryville*.....	7½	116½	107½	2 20
ow,	Lackawaxen*.....	4	120½	103½	2 30
ort Jer-	Narrowsburgh, N. Y.*	11	131½	92½	2 50
A. M.;	Cochecton*.....	8½	140	84	2 75
on at 7	Callicoon*.....	5	145	79	2 90
	Hankins*.....	7	152	72	3 00
	Equinunk*.....	10½	162½	61½	3 25
	Stockport*.....	4½	167	57	3 35
ine	Chechocton*.....	6	173	51	3 40
York to	Deposit*.....	13	186	38	3 65
on, 12	Lanesboro' Pa.*.....	15½	201½	32½	3 85
	Great Bend*.....	8½	210	14	4 00
	Conklin, N. Y.*.....	9½	219½	4½	4 20
	Binghamton.....	4½	224	..	4 50

rough train to Binghamton stops only at the places marked thus *.

te of the last Annual Report of the Directors, the road had just been com- was in operation to Port Jervis on the Delaware River, 74 miles from Pier- at Report it was stated that the Directors hoped to extend the road to during the year. That anticipation has been realized, and on the 27th last, a passenger train passed from Piermont to Binghamton, and on the ry, passenger and freight trains commenced their regular trips.

has been constructed in the most substantial manner, and is laid with rails of the most approved pattern. The Company have now completed wo hundred miles of railroad, and are vigorously prosecuting its further

ghamton to Corning, a distance of 76 miles, the work is under contract. sted to the latter place by the 1st of December next.

ng of the road between Binghamton and Owego is finished, and the rails as early in the spring as the season will permit. Before the close of the ; the Directors intend to run the cars to Corning.

ement has been made with the Chemung Railroad Company, by which

their road will be run in connection with the Erie, and by means of steamboats on Seneca Lake, a direct line will be formed between New York and Geneva.

Satisfactory progress has been made in the construction of the Newburgh branch, and it is the intention of the Directors to complete it during the ensuing summer.

The bonds issued under the act of May 14, 1845, have all been assigned by the Comptroller, and the proceeds applied to the construction of the road. The Company have deposited with the Comptroller, as required by law, the sum of \$597,501 46 to meet the interest on the bonds up to May 14, 1851.

The receipts of the Company from all sources for the year ending	
December 31, 1848, were.....	\$4,709,713 58
Cash on hand January 1, 1848.....	170,441 83
Total.....	\$4,880,155 41
The expenditures for the same time on account of construction and materials, machinery, repairs, running the road, and for all other purposes, were.....	4,573,740 33
Cash on hand 1st January, 1849.....	\$206,415 18

TABULAR STATEMENT.

Number of miles in operation, December 31.....		74
Construction, including pier.....	\$3,276,678 76	
Number of through passengers.....		28,324
“ way “.....		259,744
Receipts from through “.....	\$35,613 83	
“ “ way “.....		90,108 50
Receipts Railroad.....	\$95,957 19	
“ Ferry.....	29,765 13	
		\$125,722 32
Receipts of freight and mail by Railroad.....	\$150,478 13	
“ Ferry.....	34,712 80	
		185,190 93
Total income from transportation.....		\$310,913 25
Expenses of repairs and running the road.....	\$131,918 32	
“ maintaining ferry between New York and Piermont.....	63,590 17	
		\$195,508 49
Amount of dividends (interest on stock 6 per cent).....		\$133,437 33

The Company own 19 locomotives, 24 passenger cars, 383 eight wheel freight cars, 1 machine shop; average number of men employed in transportation, 200; number of miles run by passenger trains, 85,898; number of miles run by freight and other trains, 117,328—total, 203,226.

MICHIGAN CENTRAL RAILROAD.

We have given from time to time, in this department of the *Merchants' Magazine*, condensed statements of the condition and character of this road. Since the last annual exhibit, a spacious freight and passenger depot (one of the largest and most magnificent in the United States) has been completed in the lower part of Detroit; also, very large and commodious machine shops. The old track has been, and is being, rebuilt and straightened in many places on the route between here and Kalamazoo. Within the past year, the road has been extended from Kalamazoo to Niles, on the St. Joseph, and will be completed to New Buffalo, on Lake Michigan, by the first day of May, 1849. Nearly the whole of the old track has been relaid with heavy T rail, and the balance will be at the earliest possible period. During the past season, several new and splendid Massachusetts manufactured engines have been added to the motive power of the road. The new passenger cars which the company have constructed and placed on the road, and others, which will be in requisition during the present season.

if the most costly and magnificent finish that can be found on any road in the United States.

The average number of men employed in operating the road, and not connected with the constructive department, has been three hundred and eight. The number of trains run by passenger trains, 101,863; by freight trains, 113,069; by gravel trains, 311.

The company are constructing large workshops at Marshall, 110 miles from Detroit, which will be the central point on the road for repairs, building machinery, &c. After opening of navigation, there will be two daily trains of passenger cars each way—morning and afternoon. There will also be two daily lines of first-class lake boats on Lake Erie, running in connection with the road—one going directly through to Buffalo, the other touching on the south shore.

The entire road is under the supervision of J. W. Brooks, Esq., the able and indefatigable Superintendent for the Company. The track and machinery are kept in the perfect order; and the utmost regularity as to time, at the different stations, is observable.

Below will be found a correct statement of the receipts and expenditures for the year ending November 31, 1848:—

RECEIPTS OF THE MICHIGAN CENTRAL RAILROAD FOR THE YEAR ENDING NOVEMBER 30, 1848.

	Passengers.	Freight.	Miscellaneous.	Total.
January, 1847.....	\$6,345 67	\$11,099 47	.....	17,445 14
February, 1848.....	5,562 40	6,928 93	\$4,648 00	\$17,139 33
March, 1848.....	5,131 98	8,798 12	15 50	13,945 60
April, 1848.....	7,018 32	11,086 00	6 25	18,110 57
May, 1848.....	11,222 91	14,012 05	6 25	25,241 21
June, 1848.....	15,006 54	13,948 66	4,496 00	33,451 20
July, 1848.....	14,688 59	16,036 21	131 25	30,856 05
August, 1848.....	12,849 61	6,948 79	6 25	10,804 65
September, 1848.....	15,284 38	9,513 28	.....	24,797 66
October, 1848.....	20,133 99	34,637 47	28 00	54,799 46
November, 1848.....	25,146 35	46,289 69	16 25	71,452 29
December, 1848.....	17,380 60	29,520 70	37 35	46,938 65

Total..... \$155,771 34 \$208,819 37 \$9,391 10 \$373,981 81

Number of through passengers..... 13,409
 " " way..... 69,778½

Total..... 83,187½

The disbursements by the Michigan Central Railroad Company, for the year ending November 30th, 1848, have been as follows:—

CONSTRUCTIVE ACCOUNT.		OPERATING ACCOUNT.	
Land.....	15,857 63	Road repairs.....	\$38,721 06
Building.....	437,402 07	Building ".....	1,351 71
Grading.....	69,512 23	Shop ".....	.....
Reconstruction.....	752,079 80	Locomotive repairs.....	30,845 03
Engineering.....	11,865 70	Car ".....	19,358 60
Engineers.....	97,895 50	Locomotive services.....	20,229 79
Agents.....	48,421 58	Train ".....	4,914 43
Motives.....	88,987 81	Station ".....	37,603 09
.....	118,011 36	Fuel.....	22,827 84
Buffalo harbor.....	49,535 61	Oil and waste.....	7,172 85
Steamboat.....	72,118 64	Stationery.....	1,959 13
Boat repairing.....	21,391 51	Incidentals.....	2,722 74
Cost.....	107,820 54	State tax.....	11,000 00
Contingents.....	21,678 45		
Total.....	\$1,911,078 43	Total.....	\$198,706 27

HUDSON RIVER RAILROAD.

This road, under the efficient management of John B. Jervis, is progressing, although no part of it is in operation. They have, since the last Annual Report, put under contract for grading an additional line of about 20 miles, making the whole length of road now under contract, 75 miles, ending at Poughkeepsie, in the county of Dutchess. A corps of engineers have been engaged for the past year in surveying, mapping, and preparing for locating the line extending from Poughkeepsie to Greenbush; the maps of which were ready for filing in the office of the several county clerks in all the month of January.

The total expenditures of the Company from its organization (1st of March, 1847) to December 31, 1848, may be stated as follows:—

Grading.....	\$1,164,412 44
Piling and bridging.....	54,001 89
Land for road in county of New York.....	93,767 12
" " " Westchester.....	161,196 64
" " " Putnam.....	17,779 73
" " " Dutchess.....	77,261 12
Depots and depot lands.....	131,808 34
Iron.....	343,535 50
Superstructure.....	15,173 55
Draw Bridges.....	3,618 06
Water Stations.....	25 00
Interest to stockholders, November, 1847.....	26,830 61
" " May, 1848.....	34,690 01
" " November, 1848.....	47,388 92
Office expenses and salaries.....	22,627 91
Contingent expenses.....	4,376 48
Commissioners' expenses.....	6,134 27
Engineering expenses.....	88,909 36
Land expenses, salaries of agents, cost of procuring land...	25,494 92
Depot expenses.....	504 62
Total expenditures to December 31, 1848.....	\$2,322,131 39

UNION CANAL COMPANY.

The Annual Report of the Union Canal Company, as we learn from *Poor's Railroad Journal*, furnishes a highly satisfactory exhibit of the business of the past year. The total tonnage is 153,222 tons, showing an increase of 13,965 tons over the year 1847. There were 20,102 barrels of flour transported; 314,068 bushels of grain, 72,671 tons coal, 32,625 bushels salt, and 81,365 bushels lime. The trade of the Susquehanna is annually and rapidly increasing, but the largest portion of it is diverted from this canal by a long and circuitous route through two neighboring States. It is to be hoped that exertions will be made to have the canal enlarged at an early period, throughout its entire length, so as to admit the passage of the Susquehanna and Juniata boats. This would not only bring an increased business to this route, but would materially increase the amount of tolls received by the Schuylkill Canal.

STEAMBOATS ON THE WESTERN WATERS.

The total number of boats now running upon all the streams emptying into the Mississippi, is 572. The tonnage of these boats is 118,655 tons; their value is estimated at \$5,189,979; the yearly outlay at \$19,915,753; and annual earnings at \$17,428,840. The largest number of all the boats now running, it is said, *lose money*, while the entire capital is exhausted in four years.

MERCANTILE MISCELLANIES.

ANNUAL REPORT OF THE MERCANTILE LIBRARY COMPANY OF PHILADELPHIA.

WE take great pleasure in laying before our readers the Twenty-sixth Annual Report of the Directors of the Mercantile Library Company of Philadelphia, entire; a document as just and manly in conception as it is chaste and beautiful in style. It is alike creditable to its author and the institution whose affairs and views it so admirably illustrates. In a former number of the *Merchants' Magazine*, we published the interesting correspondence which took place between Messrs. ROBERT F. WALSH and WILLIAM L. SCHAFER, a committee appointed in behalf of the Company, and THOMAS P. COPE, Esq., the philanthropic President of the Institution, relating to the portrait of that gentleman, executed by Mr. John Neagle, which now embellishes the noble Library of the Company; and we are quite sure our readers will be gratified to learn that a mezzotint, copied from the portrait of the venerable President, is in course of preparation, by Sartain, and will be published in an early number of our *Magazine*, in connection with a sketch of the life and character of Mr. Cope, the steady and undeviating friend of the Company, and one of the brightest living illustrations of mercantile intelligence, honor, and honesty, our country has produced.

The following report, referred to above, was presented at a meeting of the stockholders, January 9th, 1849:—

The Directors of the Mercantile Library Company of Philadelphia, in presenting their Twenty-sixth Annual Report, cannot refrain from expressing their high satisfaction with its continued prosperity.

With increased means of dispensing useful information, it pursues its quiet and unobtrusive course, attracting many, especially of its more youthful members, and supplying them with opportunities of moral and intellectual culture, which, we sincerely trust, will result in a rich return of prosperity and happiness, not only to them, but to those connected with them, in the relations of domestic, social, and business life.

The Treasurer's Report, herewith submitted, will display a satisfactory statement of the Company's finances. During the past year the debt to the Philadelphia Dispensary has been paid in full; and consequently, the ground rent due that institution is entirely extinguished, leaving the present incumbrance on the property eighteen thousand dollars.

There have been received one hundred and thirteen new Stockholders, and seventy-one shares of building scrip have been converted into active shares. The number of volumes purchased since last report is six hundred and sixty-one. The Library now contains twelve thousand two hundred and thirty-two volumes, and we are happy to state, that they consist principally of works of permanent value. The Directors have been careful to exclude from the shelves, books of a frivolous character, or of demoralizing tendencies. It has been their desire to supply to the young men of our city, the means of acquiring solid and useful knowledge, to prepare them for the more responsible positions they will occupy in future life, to enable them to obtain habits of clear and calm reflection; habits which they will find indispensable to the successful pursuit of business.

A well trained mind is as necessary as a well endowed one, to succeed in any pursuit, whether it be of science or of business.

The possession of a lofty intellect is comparatively of little value, unless it be trained to habits of calm reflection, and stored with knowledge of practical utility.

It cannot be denied, that many successful merchants did not in early life possess extended means of intellectual culture. Thrown in boyhood on their own resources, they were compelled to seek the means of subsistence by their constant labor. It is true that they were thus taught habits of industry and enterprise, and they can point to the past as compared with the present, and claim with justice the meed of public approbation and respect for their long continued exertions and unwavering probity; but would they not willingly have embraced in their earlier lives, opportunities of improve-

ment, had circumstances permitted it! and do they not now regret the deprivation which prevented that early culture, which, if attained at all in after years, can be acquired only in the face of difficulties, which to the timid appear insuperable!

To supply these wants, to furnish the members of the mercantile profession and others, with the means of moral and intellectual advancement;—to teach them habits of thought and action essential to success in life;—to make them not only prosperous merchants, but good and wise men, the Mercantile Library Company was established; and it should be the cause of just pride to the mercantile community of this city, that these objects have been attained in so great a degree.

It has been observed, that within a few years past there have been undoubted indications of an improved public sentiment in regard to the designs of this and similar institutions. The growing interest in this enterprise, the enlargement of the Library, the increased number of visitors to its rooms, tend to prove a progressive elevation of the mercantile character.

These thoughts should encourage us to continued exertion, so that, when our successors in the business pursuits of life shall assume the places which we must soon abandon, a higher degree, not only of commercial, but general intelligence, may mark the mercantile character of our city.

At no period, perhaps, has correct and extensive information been so essential to the mercantile classes as at the present time, and to none is it more important than to the American merchant. The peculiar condition of the European world, with its crumbling thrones and fallen dynasties, agitated by revolutions, political and social; the removal of barriers which have obstructed commercial intercourse between different nations, the diffusion of intelligence among the people, the growing importance of public opinion, the elevation of the middle, and to a certain extent, poorer classes, to the enjoyment and benefit of travel, the consequent destruction of prejudices, and encouragement of international communication, will all tend to unite in peaceful harmony, States and Empires, by ties firmer and more durable than the alliances of Kings and Emperors, the bonds of an enlightened and liberal commerce, founded on reciprocal confidence, and mutual interest. Every change, political or social, in Europe, necessarily exerts great influence on the commerce of the world.

The intelligent merchant, who can contemplate at one extended view, the probable causes and consequences of such changes, their effects, present and to come, will be more likely to reap a rich harvest in his own prosperity, and contribute in some degree to the honor of his country, than if he moves ignorantly in the current of a hasty and uncertain enterprise.

From the position which our people occupy as a nation, taken in connection with the unsettled state of Europe, the American merchant, if he does not already, will soon exert a commanding influence on the commerce of the world; and we therefore urge our younger brethren in mercantile pursuits, to prepare to enter on that field of honorable enterprise and labor, which is now opening to them. If, with an enlightened conscience, they apply themselves to this noble work, they will, with the exercise of proper energy and prudence, in all probability not only attain success for themselves, but will contribute to the credit of their country and the benefit of their race.

The increased commerce of the country is constantly discovering the means of rapid extension. However our fellow-citizens may differ in opinion respecting the policy of territorial acquisitions, it will be admitted that they open new and fruitful fields to commercial enterprise.

We learn from history, that the progress of civilization is identical with that of commerce. That division of the human family, whose destiny it has been to inhabit these United States, have been impelled by the spirit of a restless activity, applied to trade and navigation, by an untiring energy, love of adventure, and passion for gain, towards the western coast of this Continent, until it has reached the shores of the Pacific, and brought modern civilization face to face with the older civilization of the Asiatic world.

The vast plains of Oregon will in time be occupied by an industrious and enterprising population. Already is California receiving her thousands of inhabitants. The coast of the Pacific Ocean, with its noble rivers and commodious harbors, invites our commerce to its ports. That distant sea will be frequented by our vessels, and to this field the enterprise of many of our citizens is now directed.

The ports of Oregon and California will receive the commerce of the opposite extremes of Asia. The products of the Atlantic border will there seek a market, and their returns may increase the wealth and reward the industry of the merchant and producer here.

well-informed merchant, thinking rightly, acting energetically, and prudently himself of opening opportunities, success is almost certain. Important effects are rapidly issuing from the events of the last few years. Many of the precious metals in abundance within our borders, the probable a shorter and more direct avenue to the Asiatic world, the more general of steam power to ocean navigation, the possession of the safest and most harbors on the western coast of America, the formation of commercial treaties with several important Asiatic powers, will tend to give us advantages in competition with Europe for the rich commerce of the fruitful East; and enlightened legislation by intelligent public opinion, will direct these advantages to the promotion of industrial interests.

Regarding carefully the important transitions of the eventful period in which we are pressed by the magnitude of the results, as influencing not only the present future time, the young merchant and the clerk will perceive the importance of mental culture, and that of a high character. Intelligence will promote success. Intelligence we mean not only a technical knowledge of the details of commerce, but general and accurate information of the social and political condition of the world, the habits and wants of the people of its several divisions, their trade and finance, and all those facts and principles, which govern their individual and national habits of thought, will render knowledge available for useful and profitable

design of the Mercantile Library Company to encourage these habits, and information. If our younger brethren now avail themselves of the opportunities here presented, when they shall have attained the maturity and established reputation, they will look back upon their earlier days with reminiscences of pleasant and profitable hours passed within this hall, and attribute much of their stability and happiness (under the Providence of God) to this honored In-

stitution. Do not begin too soon, or be too diligent in using the means of improvement. Industry is the law of our being; think well how to apply that, or no affluence of fortune, or advantage of position, will exempt you from devoting your time and energy to some useful pursuit.

enjoyment, and not sorrow,
for a destined end or way;
do act, that each to-morrow
find us farther than to-day.

"Let us then be up and doing,
With a heart for any fate;
Still achieving, still pursuing,
Learn to labor and to wait."

Indolence can never be recalled; indolent habits once formed will be difficult to overcome. Experience and observation prove, that knowledge and prudence, with industry acquired in youth, exert most favorable influences on the conduct of life.

There may be found among the merchants of our city, of men, whose names we respect, not only for their business success, but for an inflexible uprightness and whose integrity, superior to all falsehood, has enabled them to lead honest and honorable lives, dignified by a beneficence, which applies their time and means to the relief of others; whose wise resolves and undaunted perseverance have overcome obstacles which obstructed their progress.

For examples we invite the attention of those who are about crossing the threshold of commercial life, and assure them that by taking as the foundation, intelligent prudence and unremitting industry, sustained by unwavering probity and endeavor to perform the duties of their relations to this life and that to come, they can erect a noble superstructure of respectability, prosperity, and happiness.

Respectfully submitted, by order of the Board.

MEMOR, Secretary.

THOMAS P. COPE, President.

EXTENSIVE CLOTHING ESTABLISHMENTS.

In our number of the Merchants' Magazine we made some remarks on the increasing importance of the clothing trade in our large commercial cities, pointing out the causes why it had, in a great measure, swallowed up two other industries, namely, that of the cloth retailer and the merchant tailor, blending, as it were, in one. We instanced, in that article, one in the city of New York, Messrs. Devlin's, in John-street, as an illustration of our position. Our at-

tention has since been called to several similar establishments, but no one has impressed us more forcibly with the progress and extent of the business, if we except Simmons' famous "Oak Hall" in Boston, which we recently visited, than that of Messrs. Lewis and Hanford, situated in Pearl-street, and occupying four stores, Nos. 252, 254, 256, and 258, comprising thirteen spacious rooms, five of which are used as sales rooms, three for coats, pants, and vests, two for their extensive variety of shirts and drawers, and one as a packing department; besides two large rooms for cutting and trimming, and four for another branch of manufacture carried on by the same house, embracing oiled clothing and covered hats, designed for seamen, firemen, and a large class of hardy men who are exposed to all weathers and all seasons. But the number of persons connected with this establishment, in one way or another, will, perhaps, give the best idea of the extent of its industry. In the first place, seventy-two persons are employed in the various departments on the premises, two-thirds of whom are married men with families, all dependent on the establishment for the comforts and luxuries of life, and all contributing to swell the amount of its productive industry. But the 3,600 "outsiders," a large portion of whom are women and girls, who are employed "from early dawn to latest eve" in plying the needle, &c., will enable any one, at all familiar with figures, to estimate the quantity of work this establishment is capable of turning out in the course of a year. From a statement of the head cutter and general superintendent, their corps of cutters, who are kept constantly employed, excepting a recess of two weeks in the spring, before commencing on the fall stock, and four weeks in the fall, prior to commencing their spring operations, it appears, *have cut, since the first of November, 1848, one hundred thousand five hundred and eighty garments, making an average of 976 garments per day.*

Notwithstanding the number and commodious size of the rooms in which this immense amount of business is carried on, we should have been incredulous as to its extent, had we not, after a close scrutiny, been struck with the perfect order and system so manifest in every department of the business. Indeed, everything about the concern is reduced to a system, and that system carried out with a degree of precision that would astonish the negligent and careless observer.

From the time the cloth is received into the store until it goes out a finished garment, it passes through its regular routine. As soon as the goods are delivered to the examining and folding department, the head man of that department examines the yards by the invoice, after which he and his assistants measure each piece of goods and examines it thoroughly, marking on the side of the piece, with a tag opposite, any hole or blemish they may discover; after which it is made up into a lot, and one ticket placed upon it stating the number of pieces in the lot, the kind of goods, and number of yards, the cost, width, and of whom it was bought. Another ticket is passed to the head man in the cutting department, who enters the ticket in the cutting account book, giving it a certain number. He then arranges a ticket headed with the number of the lot, stating the description of garments and the style the cloth is to be cut into, arranging the sizes, with any other particular directions required, putting on the name of the person who cuts it. The cutter then receives the cloth, cuts the garments, and places them on a counter, to be ticketed and trimmed. Each garment is then ticketed with its size and the number of the lot. It then passes into the trimmer's hands, who has a book of directions for that purpose. From the trimmer they are passed into the hands of the respective foremen, to distribute among the operatives, and, when made, are returned again to the foreman, who, after a thorough examination, passes them into the sales rooms, where they are arranged in complete order for the salesmen and the purchasers.

The clothing from this establishment is adapted to all markets and for all classes of men, from the humblest laborer to the fashionable gentleman—for the toiling million as well as for the "upper ten thousand," as our friend Willis would say. Reader, if you have any curiosity in the matter, or any misgivings as to our statements, just look in upon this establishment during the winter evenings, when its busy but well ordered rooms are illuminated with its one hundred and twelve gas lights, and our word for it, you will say the half has not been told.

CHANGE OF HOUR OF NEW ORLEANS HIGH 'CHANGE.

Resolved, That this Chamber recommend to the merchants and ship-masters of New Orleans to meet at High 'Change between the hours of half-past one and half-past two o'clock, P. M., and that the present system be abolished from and after the 15th of February.

THE BOOK TRADE.

labor and Other Capital: the Rights of Each Secured, and the Wrongs of Both Ignored, etc. BY EDWARD KELLOGG, Author of "Currency, the Evil and the Remedy."

We have deferred until now making a notice of this work, because it is one of those important essays whose merits demand a more careful analysis than we can afford to give upon every new work which reaches us; but owing to the disarrangement of our office by the fire which destroyed the office of our printer, we are again compelled to postpone until next month the review of the work which we had intended to give. Mr. Kellogg is a singularly clear and correct writer, and expresses his novel theories of finance in a manner which renders him comprehensible to the commonest understanding. This is a merit by no means common with writers on finance, who generally take pains to write so that the reader will be as well informed as themselves. Since the appearance of Mr. Kellogg's book, it has excited a good deal of attention among thinking men, and he has gained many converts to his peculiar notions on the subjects of usury. Mr. Kellogg is evidently a practical man, who has produced his theories from the laboratory of his own brain instead of culling them from books. This gives a freedom and originality to his expositions which render them pleasant reading even to the most blasé and skeptical students. We hope that his book may have a very wide circulation, for as it contains many fallacies, according to our own view of the subject, it also contains a great amount of political and financial truths that cannot fail to make an impression wherever they are made known; and they will, at least, set men to thinking on the important subject of finance, even though they should fail to make converts. The theories of Mr. Kellogg can be stated in a very few words: in regard to interest, he contends that the present rates are too high, and would limit the rate to 1 per cent, by law; in regard to currency, he contends that money is not merchandise—being the representative of value it should be itself valueless, and that it should be issued by the State or nation, to meet the demands of the business of the people, and for the exchange for pledged real estate. These are the naked outlines of his theories, which are illustrated and enforced with copious facts and very powerful reasoning, and we shall notice at full length in our next number.

Industrial Exchanges and Social Remedies, with a consideration of Taration. By PARISH BARNHART, author of "Letters from Europe." 12mo. pp. 238. New York: George P. Putnam.

There is, in this volume, a series of chapters upon topics connected with political economy, "mainly devoted to a view of free trade and protection in their economic and social aspects," with "such economy, governmental and social principles, as naturally suggested themselves to the author's mind, while holding the subject under consideration." It is not a dry, abstract theoretical essay. We quote from the author:—"The principles are combined with their applications, and the effects experience has shown are referred to as far as the plan of the work will admit; and only in their illustrations and analogies with free trade, are the various branches of the economical system treated." The writer has evidently reflected much upon the topics discussed, and his conclusions are more from his own free mind than the writings of the political economists; and if his views are not entirely new, his mode of treatment has an originality and freshness about it that will be quite refreshing to the general reader, as to the student, who often becomes tired with the dry, prosy style of most writers on similar subjects. We shall endeavor to refer to this work in a future number, and, at the same time, give some extracts from its pages, that our readers may be able to form their own estimate of its character.

Days of a Life-Time. By CAROLINE GILMAN. 18mo. pp. 216. Boston: James H. & Co.

This volume contains a collection of the thoughts of a pure and gentle woman, on all the relations of life, as maiden, matron, and mother, and suggested by the vicissitudes of its every day events, expressed in easy, natural, and graceful verse. The poetry of domestic life, and its sweet charities and kindly affections, with a touch of romance, the romance of real life, which is often stranger than fiction.

- 4.—*History of England from the Peace of Utrecht to the Peace of Paris.* By Lord MAHON. Edited by HENRY REED, Professor of English Literature in the University of Pennsylvania. 2 vols. 8vo. pp. 566 & 589. New York: D. Appleton & Co.

This edition, which is the first American, is printed from the last revised London edition, and has the express sanction of the author, who assented not only to the republication, but to the editorial care and supervision of Professor Reed, who has introduced many valuable notes, which are printed within brackets, so that they may be readily distinguished from the author's own notes. Of the merits of the work, it will perhaps be sufficient to say that it has been reviewed and spoken of in terms of high commendation by the *London Quarterly*, *Edinburgh* and *English Reviews*. Mr. Macauley, the able editor and reviewer, and the author of a *History of England*, says that "Lord Mahon has some of the most valuable qualities of a historian—great diligence in examining authorities, great judgment in weighing testimony, and great impartiality in estimating character. Professor Smyth, of the University of Cambridge, says of it, "I may recommend to others, what I have had so much pleasure in reading myself, the history lately published by Lord Mahon. All that need now be known of the era from the peace of Utrecht to that of Aix-la-Chapelle, will there be found." With a single extract from the *London Quarterly Review*, we close this notice, not, however, without expressing our approbation of the elegant manner in which the American publishers have reproduced the work in this country.

"Lord Mahon has shown throughout, excellent skill in combining, as well as contrasting, the various elements of interest which his materials afforded; he has continued to draw his historical portraits with the same firm and easy hand; and no one can lay down the book without feeling that he has been under the guidance of a singularly clear, high-principled, and humane mind; one uniting a very searching shrewdness with a pure and unaffected charity. He has shown equal courage, judgment, and taste, in availing himself of minute details, so as to give his narrative the picturesqueness of a memoir, without sacrificing one jot of the real dignity of history. . . . His history is well calculated to temper the political judgment. It is one great lesson of modesty, forbearance, and charity."

- 5.—*Gothic Architecture, Applied to Modern Residences.* By D. H. ARNOT, Architect. New York: D. Appleton & Co.

The design of this work, which is in course of publication, is to select from the simple elements of design, the most applicable and intelligible forms, and combine them in the most useful and imposing manner, without affectation or distortion. This work is devoted to designs for entrances, halls, stairs, and parlors, window frames and door panelling, the jamb and label mouldings, to a large scale; the decoration of chimney breasts and mantels, panelling and groining of ceilings, with the appropriate furniture. It is moreover copiously illustrated with working and prospective drawings, forming all the necessary parts of a modern dwelling in the Gothic style. "Although numerous specimens and adaptations of Gothic art are already before the public, still they relate to plans and purposes foreign to the taste and practice of this country; consequently, in this particular branch of art, this work may be considered as the first attempt to supply a want which has long been felt both by the professional man and amateur."

- 6.—*Friends and Fortune: a Moral Tale.* By ANNA HARRIET DEURY. 12mo. pp. 240. New York: D. Appleton & Co.

When we took up this book, we had no idea that we should become so much interested as not to be able to lay it down until we had finished the narrative; but such is the fact. The interest of the story is sustained throughout; the characters are true to nature and life, drawn by one who understands the human heart in all its movements. A fine vein of wit and womanly sarcasm, blended with high moral aims, pervades almost every page, and lends a charm to the story, not to be found in the trashy fictions of the day. It is one of the best domestic tales we ever read.

- 7.—*Aurifodina: or, Adventures in the Gold Region.* By CANTILL A. BIGLY. New York: Baker & Scribner.

We presume this work will sell, and we suppose that to be the design of the author and publishers. It has been suggested that the name of the author was significant of the character of the work, who, it is said, *can tell a big lie*. As it may serve to relieve the tediousness of a voyage around the Cape to the golden land of promise, its publication, at this time, may not be altogether without an object.

—*Oregon and California in 1848.* By J. QUINN THORNTON, late Judge of the Supreme Court of Oregon, and Corresponding Member of the American Institute. With an Appendix, including recent and authentic information on the subjects of the Gold Mines of California, and other valuable matter of interest to the emigrant, etc. With illustrations and a map. 2 vols. 12mo. pp. 393 & 379. New York: Harper & Brothers.

The American people are in a fair way to become pretty well acquainted with the character and condition of our newly acquired territories on the Pacific. The first of these two volumes is devoted entirely to Oregon, and contains a sea route of the journals of the author, with a full, and, we presume, accurate description of the soil, productions, boundaries, mountains, population, character, &c., of Oregon. The second is mainly taken up with similar particulars relating to California, besides the most recent and authentic information touching the gold region. The work contains useful hints and much information of value to the emigrant, derived from the observation and experience of the author, whose means of information, it will be admitted, is of a character that cannot fail of securing for his statements and observations the respect of every intelligent reader. There are a number of well executed illustrations, and a very fine map of Oregon and California, which greatly enhances the value of the work, and renders it an indispensable *vade mecum* for the emigrant.

—*The Ship-master's Assistant, and Commercial Digest: containing information necessary for Merchants, Owners, and Masters of Ships, etc.* By JOSEPH BLUNT. 8vo. pp. 820. New York: Harper & Brothers.

This is the third edition of a work, designed, as its title indicates, for merchants, owners, and ship-masters. The legislation of the United States on commercial affairs is here reduced to a system, in as condensed and compact a form as the nature of the undertaking would admit. The subjects embraced in the several divisions of the work relate to masters, mates, seamen, owners, navigation laws, policies, revenue cutters, custom-house laws, importations, clearing and entering vessels, drawbacks, freights, insurance, average, salvage, factors, bills of exchange, currencies, wreck laws, quarantine regulations, marine offences, slave trade, pensions, consuls, commercial regulations, tariffs, warehousing, collisions, &c. On all these subjects, the work appears to be full and complete, and, as a work of almost daily reference, its value to commercial and business men will render it an almost indispensable *vade mecum*.

6.—*The History of England, from the Accession of James II.* By THOMAS BABINGTON MACAULEY. Vol. II. 8vo. pp. 617. New York: Harper & Brothers.

As we have before expressed our opinion of its merits, in noticing the first volume, our main object, at this time, is to announce the appearance of the second volume. Its success, it may, however, be remarked, is the best evidence of its popularity, both in England and the United States. An objection has been made, and, in our opinion, a ridiculous one, to the effect that the American publishers have adopted the orthography of Webster in preference to that of Walker or Johnson, by spelling a few words, *a honor*, without a *u*, and *public* without a *k*. This is perfectly right, as it is only keeping pace with the progress of the English language, by lopping off its superfluous rudiments.

1.—*An Elementary Treatise on Mechanics, embracing the Theory of Statics and Dynamics, and its application to Solids and Fluids.* Prepared for the Under-graduate Course in the Wesleyan University. By AUGUSTUS W. SMITH, LL. D., Professor of Astronomy. 8vo. pp. 307. New York: Harper & Brothers.

The preparation of this treatise was undertaken, we are informed, under the conviction that an elementary work on Analytical Mechanics, suited to the purposes and exigencies of the course of study in colleges, was needed; an impression, the result of long experience in teaching on the part of the author. The author has adopted the analytical method of investigation, consulting and availing himself in its preparation of the most popular authorities. In as far as we are capable of judging, and from an examination necessarily cursory, we should say that, as a whole, it was well calculated to advance the progress of the study of mechanics.

2.—*The Sick Chamber.* Boston: James Munroe & Co.

The hints and advice furnished in this excellent little manual are well worth heeding, particularly all that relates to the nurse, the patient, quiet, ventilation, washing, meals, &c.

- 13.—*Tour of Duty in California, including a Description of the Gold Region, and an account of the Voyage around Cape Horn; with notices of Lower California, the Gulf and Pacific Coasts, and the Principal Events attending the Conquest of the Californias.* By JOSEPH WARREN REVERE, Lieutenant U. S. Navy, lately in command of the Military District of Sonoma. Edited by JOSEPH N. BALESTIER, of New York. With a map and plate from original designs. 12mo. pp. 305. New York: Charles S. Francis.

This is quite an interesting and readable volume, and we are assured by the editor, Mr. J. N. Balestier, that its entire authenticity may be implicitly relied upon, not the slightest liberty having been taken with matters of fact furnished by the author. The additions of Mr. B., derived from the most authentic and accessible data, are interwoven with the text in such a manner as not to mar the unity or interest of the work. Besides the interesting number of personal incidents and adventures of the author, we have a large amount of information touching the soil, climate, productions, manners and customs of the people, which must prove highly valuable to the emigrant, while it adds to our limited stock of knowledge in regard to California. It is one of the few books on the subject, that affords anything like accurate or reliable information; and will, we have no doubt, be found exceedingly useful to the adventurous spirits about departing for the newly acquired territory of the United States, either in search of gold, or occupation and settlement. We shall have occasion to refer to this work in a future number of our Magazine.

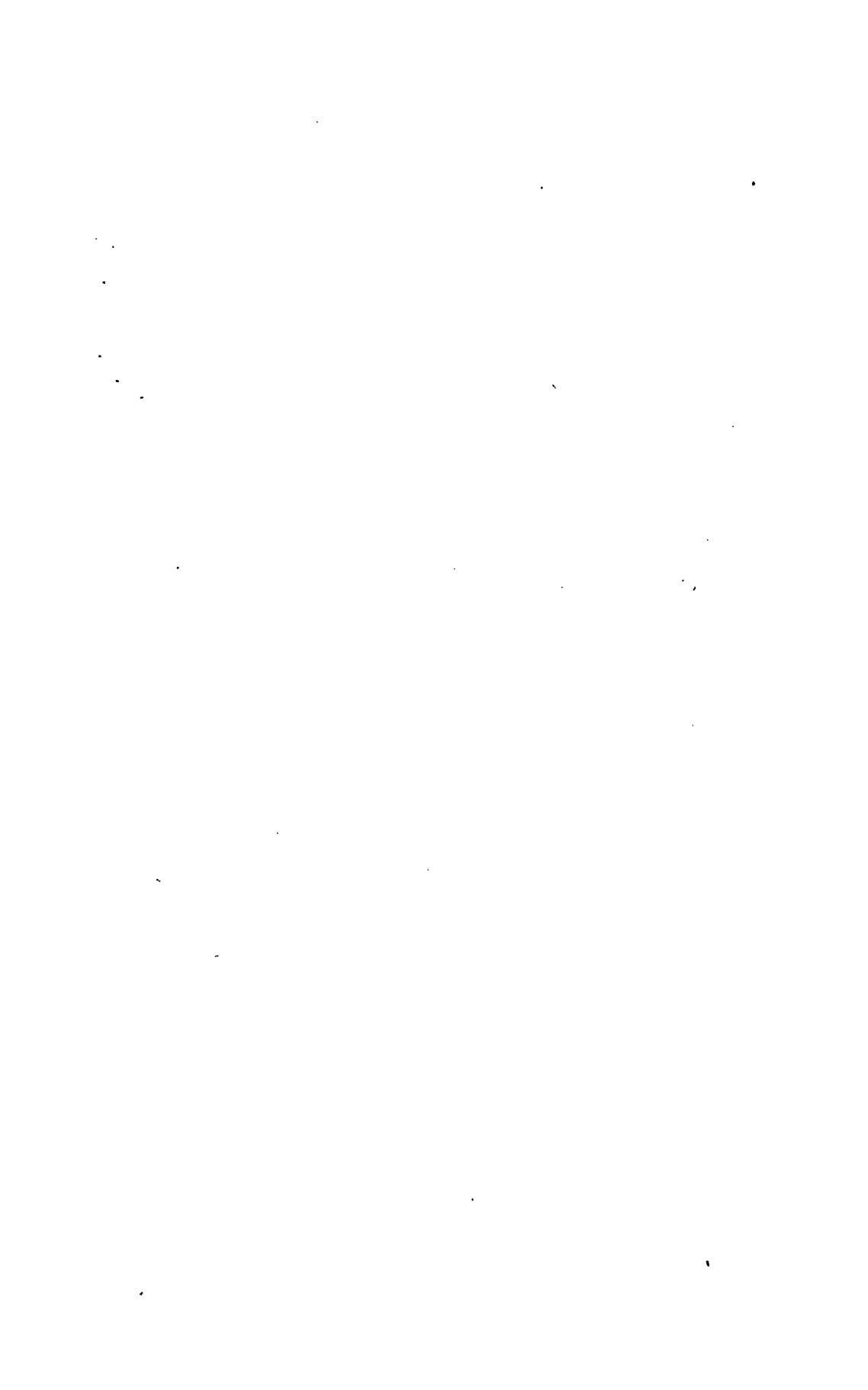
- 14.—*Outlines of the Course of Qualitative Analysis followed in the Gressen Laboratory.* By HENRY WILL, Ph. D., Professor Extraordinary in the University of Gressen. With a Preface. By Baron LIEBIG. 12mo. pp. 139. Boston: J. Munroe & Co.

This work is designed for use in the laboratory of the practical chemist; consequently, everything which does not immediately refer to the processes of analysis is very properly excluded. It contains an accurate description of the course followed in the laboratory of Dr. Liebig, with advantage, for twenty-five years; and was prepared by Professor Will, who was Dr. L.'s assistant during a great part of that period, and at his request.

The destruction, by fire, of the establishment in which our Magazine was printed, has been a source of no small loss and inconvenience to us. The loss of our printer, GEORGE W. WOOD, the proprietor of the printing office, has been severe, amounting to some \$9000, with the exception of \$500, insured. The building, being occupied by Hox and Co., the extensive press manufacturers, with steam-engines, and located in one of the narrowest streets in New York, was considered very hazardous by underwriters, and it was with great difficulty that Mr. Wood obtained insurance for the small amount named, at 3 per cent premium. The great loss we experienced on account of the total destruction of nearly all the copy given out for the March number, and mostly in type, we have only been able to repair by doing our work over again, as far as that was practicable. The loss, we have the satisfaction of knowing, however, is all our own, so far as the Magazine is concerned, as our patrons will notice that our journal appears on an entirely new and beautiful type, from the foundry of Mr. JOHN T. WHITE; and although the number for March has been made up almost entirely of new or other matter than that originally prepared, we believe that it is equally as appropriate to the character of our journal, and will be found as valuable to our readers as that which was destroyed. The few days of delay in the appearance of the Merchants' Magazine could have been avoided, by employing another printer, with an office prepared for the work; but we preferred retaining our worthy, but unfortunate friend, Mr. Wood, who has been our printer for the last seven or eight years, faithfully discharging his duty to the best of his ability.

Several papers from correspondents were destroyed, but all, with the exception of two, have been replaced, and will be published in a future number of our journal. Among the former, there was, we regret to state, a paper received from the Secretary of the Norfolk County Health Insurance Company, of Massachusetts, commenting upon the article on the Law of Sickness, which appeared in the number for December, 1848, analyzing the tables of Mr. ANSEL, upon which that article was based, and controverting his assumption of a scale of sickness graduated by different ages. The writer preserved no copy of that communication, but will probably be able to prepare another, having in his possession the data on which his conclusions were based.

A Correspondent has requested a place in the April number of our journal for an answer to the paper in the February number, on the Coast Survey of the United States.





1840

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THE

MERCHANTS' MAGAZINE,

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BY FREEMAN HUNT, EDITOR AND PROPRIETOR.

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HUNT'S MERCHANTS' MAGAZINE

AND
COMMERCIAL REVIEW.

APRIL, 1849.

Art. I.—PEN AND PENCIL SKETCHES OF LIVING MERCHANTS.*

NUMBER I.

THOMAS P. COPE, Esq., OF PHILADELPHIA.

[WITH A PORTRAIT.]

IN all countries, the character of the great and good has been deemed a part of the public fame; and nations which have derived political or pecuniary advantage from the talents and labors of their distinguished citizens living, have put in a claim to the posthumous credit of those men, as if a portion at least was to escheat to the benefit of the Commonwealth. No form of government has ever excluded such a claim, because no form of government, however bad, has been enabled to repress the virtues, or diminish the generous ardor of those who, marked by Providence with high special gifts, will work out for themselves a path to fame, by directing their powers in such pursuits as tend, by multiplying individual good, to promote public benefits.

Just in proportion as the government of a nation tends towards true republicanism, is the proper fame of the individual appropriately available to the mass; and as the popular voice has more and more weight, the char-

* In addition to our series of biographical sketches of eminent merchants and business men, (now numbered with the dead,) published from time to time in previous numbers of the "*Merchants' Magazine and Commercial Review*," we shall hereafter endeavor to give an occasional sketch and portrait of some of our most distinguished living merchants, bankers, &c.; but, as our ability to do so will depend upon the "advice and consent" of a second party, we will venture upon no promise to our patrons. Commerce is not only a business, but a science, extremely intricate in some of its developments, and calculated to elevate the mind and enlarge the understanding, when pursued upon legitimate principles, and with high and honorable views. Now, as our religious, political, and literary journals furnish the "pen and pencil sketches" of living divines, statesmen, and men of letters, we can see no good reason why "King Commerce" should not have his appropriate niche, to perpetuate the matchless enterprise and the costly virtues of his subjects. For these, and other equally valid reasons, we trust that our plan will be appreciated and encouraged by the favorable co-operation of that large and influential class, for whose moral, intellectual, and pecuniary benefit our journal was established, and has thus far mainly been sustained.—*Ed. Mer. Mag.*

acter of each individual becomes more and more important to the whole; and society at large feels and expresses the deep interest which it has in the conduct and fame of any citizen who, by talent, enterprise, and virtuous devotion to an honorable calling, and the prompt and willing discharge of civic and social duties, acquires extensive fame, and sustains, with appropriate bearing, the dignity of his acquired position.

Hence the great propriety in this country of respect to the memory, and affectionate gratitude to the persons of those who distinguish themselves by successful efforts in any of the professional walks of life, or in the various departments of business and trades. Each effort, it is evident, has generally for its primary motive the connection of the credit of the actor, or the special circle of the distinguished, with the fame which is acquired; but no sooner is the honor proclaimed, than it becomes not only a part of the public possession, but an element of public pride and enjoyment. Popular feelings and popular advantage are expressed and promoted by the immediate recipients of the credit, while they seem to be appropriating to their own honor the credit of their co-laborers. This moral impost is always levied, and as one class of citizens has the same interest in the credit of the whole as any other class can possess, none seems unwilling to submit to the taxation, and the fame and honor of our republic are daily augmented by the accretion of individual credit to the mass of social or associated fame.

Hitherto the fame of the merchant has been considered incomplete, unless it was connected with some direct public, civic, philanthropic, or political service, which, while it reflected honor upon the man, seemed to overshadow the unobtrusive virtues of the merchant; so that the apparent solecism has been presented of a class of citizens proud of their own profession, and yet dissatisfied with any honor that did seem to diminish, relatively at least, the worth of that profession of which they were justly proud.

Our opinion of "mercantile character" is so elevated, that we see in the career of a merchant enough to give him all the distinction, all the claims upon public regard, which can be deserved by those who properly estimate popular approval in a popular government; and we think lightly of any man who, in a republican government, can undervalue public esteem. Men may talk as they please of a philosophical disregard of the opinions of their fellow-men, and a contempt for public consideration; but scarcely any man thus expresses himself without a desire to attract consideration, by the apparent disinterestedness of feeling in which the remark originates, or without a desire to depreciate the value of that, of which he begins to find himself underserving.

We believe that an American merchant has, in his proper calling and selected condition of life, the means of high, permanent distinction; and our belief is founded on observation, that there commences, with the evidence of mercantile enterprise and the proof of mercantile integrity, a fame as desirable, as gratifying, as extensive, and as permanent, as that which is awarded to the statesman or is achieved by the warrior. We speak now of the merchant abstracted from his social and political relations and duties. We speak of him as "the merchant" alone, though we claim for, and all must concede to him, the possession of those qualities which are part of the elements of the statesman's character. We believe also that the high credit of a nation is as much dependent upon the honor and enterprise of her merchants, as upon the sagacity of her statesmen, and the skill and courage of her warriors; and that, abroad, an estimate of the American character, an estimate which we

most proud to recognize, is founded at least as much on mercantile relations as upon any other element of intercourse and esteem; and as that estimation and that credit are but the aggregate of individual contribution, we are, as conductors of a mercantile periodical, deemed it due, at once to mercantile pride and enlarged patriotism, to select from time to time, for special notice, one who has distinguished himself, illustrated his profession, and done honor to his country, as an *American merchant*.

It is not, we apprehend, from any supposed want of materials, or any deficiency of respect for the calling, that such a plan has not been previously adopted and carried out. It is the nature of commerce to promote and reward enterprise, and to beget and cherish honorable character. Hence, from the earliest period of our nation's history, we have had the elements of commercial biography that would have reflected honor upon the country, through the mercantile profession. Perhaps the facility with which the accomplished merchant becomes the useful statesman, and the more ready appreciation, by the people, of political contributions to public good, because those contributions are more direct, or at least more directly noticeable, have tended to give to the public benefactor the fame of a statesman, which, however due, was really perhaps to the qualities of the merchant.

Our intention is to gratify our feelings and our pride, and we hope also to correct feelings and laudable pride of our readers, by presenting biographical sketches of distinguished merchants. We shall not withhold from any one the fame which he may have acquired in any of those walks of life, civil or political, in which he may have attained to distinction; but we will not attempt to conceal the fact, when it would be otherwise obvious, that these distinctions, as philanthropist or statesman, have resulted from the character and habits of the merchant.

This number of the "*Merchants' Magazine and Commercial Review*" is ornamented with a remarkably correct likeness, engraved by Sartain, from a portrait by J. Neagle, of

THOMAS P. COPE, Esq., OF PHILADELPHIA,

and we shall commence the fulfilment of our design, by giving some notice of the life and mercantile character of the original of the portrait. Mr. Cope is a native of Lancaster county, Pennsylvania. He is a member of a highly respectable "*Quaker*" family. We love that name; we prefer the term "*Quaker*" to that of "*Friend*," because, though it was given in derision, it became a term of honorable distinction, by the merits of those who have illustrated the virtues of the sect on which it was bestowed. A bad name may destroy an individual who is denied time and opportunity to redeem himself from the opprobrium. But classes and sects that are permitted to survive the excitement, which confers an unkind and injurious appellation, may acquire to themselves a credit that shall cause that which was conferred an epithet of contempt, to become a title of distinguishing honor. So much more potent is virtue than a name; so true are mankind to virtue and ethical goodness, when their judgment is allowed time to supersede their impressions.

Mr. Cope traces his descent on both sides, for many generations, from the "*Friends*." His ancestor, Oliver Cope, was one of the first purchasers from William Penn. On the maternal side, Mr. C. has descended from the Pyma, who claim as an ancestor the celebrated parliamentarian, John Pym, whose

name is connected with that of Strafford ; and Mr. C. has, as his middle name, that of his maternal ancestor.

The education of Mr. Cope was good ; it included a general round of English studies, the German language, and that amount of Latin which was, sixty years since, deemed necessary as a foundation of a good education ; and though perhaps he has not had occasion to make a direct use of his classical studies, there can be no doubt that they greatly assisted in disciplining his mind for the pursuits of life in which he was engaged, and for those rational enjoyments consequent upon his success and his social position.

When Mr. Cope had completed that education which was deemed necessary to a mercantile life, and which in his case led to a sound literary taste, since indulged and improved, he was, in 1786, sent to the city of Philadelphia to commence the acquisition of practical mercantile knowledge, by undertaking the primary labors of the counting room, and ascended from the junior grade, which only notices events, by a simple record, to that position which plans the movement and directs the conduct of thousands ; and, while it seems to have only a selfish object, does indeed connect the interests and the feelings of countries, and brings about that state of national feelings which demands the services of the diplomatist to confirm and solemnize.

We do not learn that the early career of Mr. Cope was distinguished by any of those bold schemes which sometimes dazzle the eye of the uninitiated by the splendor of their success, and often bring extensive ruin by their almost natural failure. Mr. Cope was *educated* a Quaker, and he felt that all of his education, all that parents and teachers had imparted to his childhood and youth, was intended as a portion of his capital in the business of life—elements of success in his mercantile and his social position ; and hence, we find that *prudence* was one of the leading principles of his business plans, and that quality came to distinguish all of his conduct. He could not, to achieve a considerable advantage to himself, put in jeopardy that which, if lost, would bring distress if not ruin on others. He had no right to abuse the credit which his education, his conduct, and his character had secured. He valued that credit as a means of making the wealth of others auxiliary to his own plans ; but he could not justify to himself any undertaking which, built on the confidence of his contemporaries, should so abuse that faith as to make the chance of his own prosperity the means of injuring his friends. In other words, that which is ordinarily called “prudence” in business men, was in Mr. Cope a fixed principle of honesty, upon which he based his plans of business, and by which he limited his enterprise.

In 1790 Mr. Cope began business, and he built for his own use the store at the corner of Second-street and Jones' Alley, then known by the euphonious designation of Pewter Platter Alley. Here he transacted a large business, importing his own goods. In this location he continued until 1807, at which time he built his first ship, which he named, for his native county, LANCASTER.

Those who look back fifty-five or fifty-six years upon the history of Philadelphia, will find the record of disease and death occupying a large portion of the annals of the city ; and it seems almost natural, when speaking of one who lived through those times, to inquire what part he bore in the labors and sufferings of the people.

Mr. Cope's activity, his respectable position, and his associations, were of a kind to afford him an opportunity to distinguish himself, either by a selfish regard to his own safety, or by a magnanimous devotion to the comforts and

ty of others. He was true to himself, to the instincts of his nature, to the good circumstances with which his life had been surrounded. He promptly volunteered his services. He tarried in the city in 1793, and caught suffered from the yellow fever, which was desolating the place.

In 1797, that scourge of man again visited Philadelphia. Mr. Cope red to bear a part in the alleviation of those sufferings, which, as one of "guardians of the poor" and a "manager of the almshouse," he had such opportunity for understanding; and he, with another citizen, (Mr. Young, bookseller,) accepted from the mayor of the city (Hilary Baker) the office of almoner, to minister directly to the wants of those who were suffering in destitution, in consequence of the suspension of business. Several thousand dollars were expended by Mr. Cope and his colleague, who carried the which they purchased to the houses of the sufferers, many of whom were people who, in ordinary times, were able to be liberal themselves, to whom the charity was extended personally, and in a way that the most good could be secured from the expenditure, in the most delicate manner.

It is not the object of this paper, nor the wish of the writer, to present a detailed account of the daily doings of Mr. Cope. He commenced business, on the scale on which he conducted it a few years before he withdrew from its toils, but with those limits which moderate capital rendered necessary; and which "prudence" (again we mean a proper regard to others as well as to himself) naturally suggested. A devotion becoming a man who resolved to have a name among merchants, was manifested by Mr. Cope in his business; and he was one likely to be noticed by his seniors as marked for success in himself, and as an example to others. Yet this noticeable economy of time in the affairs of his store and counting room, was not all-abiding. To be a merchant, with all the circumstances which are connected with that profession, was of course Mr. Cope's principal object. But it would be far that the generous regard to civic and State interests, which he has manifested since his withdrawal from business, must have been apparent in his early manhood, as we find him a member of the city councils at the close of the past and the beginning of the present century, and an efficient member of the committee for introducing water into the city of Philadelphia, a measure which for a time required all the efforts of its friends to secure its adoption and execution, against the opposition of a majority, and which for a time was the occasion of great unpopularity to its advocates.

Mr. Cope was again, in 1807, called into public life by being elected a member of the State Legislature, at a time when party spirit was active, and when conservative views and votes were deemed necessary for the preservation of those principles upon which the Constitution of the Commonwealth was founded, and which that instrument was intended to express and defend. Subsequently, Mr. Cope was called on to mingle still more in public life. He allude to those early demands upon his time, to show that, with all the devotion and business habits which distinguished him and marked him for success, he had, and others saw in him, all those qualities which give weight to social life, and those abilities which make the republican citizen a faithful servant of the State. And we may add, that the demand upon his time was not limited to the city or the Commonwealth. As a man of liberal education, as one of high integrity as a sound politician and an accomplished merchant, he was naturally looked to as a proper person to represent the great interests of Philadelphia in the councils of the nation. There was no doubt of his ability to represent the people, and to promote the true in-

terests of the great commercial metropolis of the Union ; and his character and manners were such as to warrant the belief that his election would have been less a party triumph than the result of the concurrent vote of most of the people of his district.

To a young man, sensible of claims upon public confidence, and not insensible to the suggestions of ambition, such a concurrence of circumstances would seem to present a most desirable avenue to office and fame. In those days the honors of Congress had not been so extensively enjoyed, and the privileges of Congress had not been so frequently abused. At that time, a representative of fifty thousand freemen in the Legislature of the nation had a high claim upon public regard, and the office might well be coveted. At that time, and at any time since, the constituency of the Congressional representative of Philadelphia must be regarded as one of which any man may be proud. Undoubtedly Mr. Cope felt the appeal to his ambition which this offer made ; but he had other duties, and among them was that of justifying the confidence which his previous career as a merchant had secured to himself, and to manifest that prudence upon which his success was to depend, by declining all honors which must withdraw him from an immediate supervision of an extensive mercantile establishment, upon which so much more than his own direct interests depended.

Mr. Cope, as we have said, is a member of the Society of Friends. Perhaps the principles of that sect may have, in some measure, restrained him from accepting the honorable post which was about to be formally offered to him. Many of the votes of Congress involve the encouragement of war ; we do not know whether that consideration influenced him, and influences others of his religious denomination, in declining to sit in Congress ; it is certain that we seldom see Quakers in the halls of the national legislature, where their services would often be very valuable. The regret, however, to be felt for the absence of Mr. Cope on such accounts must have been augmented, at that particular juncture, by a knowledge of his intimacy with the laws of trade and their practical operation, and his straightforward adherence to what he believed to be right. Fortunately, Philadelphia possessed other sons to represent her in Congress, and while some were doing honor to their constituents in *that* place, Mr. Cope was fully occupied in the execution of enlarged plans of commerce, which were to be productive of public as well as of private benefit.

To Mr. Cope was Philadelphia indebted for the establishment, in 1821, of the first regular line of packet ships between that city and Liverpool, (England,) and the first ship employed in the line was, we believe, the *Lancaster*, of 290 tons, commanded by Captain Dixey. To this was added the *Tuscarora*, of 379 tons, commanded by Captain James Serrill. The line is still kept up, and has in it the "*Tuscarora*," a new ship, of 1231 tons. The line was sustained through all these adverse circumstances, which, for a time, threatened the destruction of the foreign commerce of Philadelphia. It followed close upon that established in New York, and is yet maintained, with augmented tonnage, by Messrs. H. & A. Cope, sons and successors in business of Mr. T. P. Cope.

About 1810 Mr. Cope removed his place of business to Walnut-street wharf, where his sons now have their counting house, and where their packet ships now lie, when in port. This place had been remarkable as the scene of misfortune to nearly all its previous occupants, and so marked had the results been, so striking and so uninterrupted, that a dread had been excited in

inds of those the least tinctured with superstition. It was what was an "unlucky place," and several of Mr. Cope's friends mentioned to ith some earnestness its bad character.

hen," said he, "I will try to earn for it a better name." And though s a wealthy man before he removed thither, yet that place is identi- ith his subsequent prosperity.

have already mentioned that "prudence" was a leading principle in ope's plans of business. He never allowed himself to be drawn into lous enterprises which would deprive him of that quiet so essential to oper enjoyment of what one has acquired, and to the proper calcula- and plans for a generous increase of possessions. Such a course would een contrary to his established mercantile principles. But there are when a merchant may incur risks without an impeachment of his pru- ; and the occasion for such a risk occurred once, at least, in Mr. Cope's ence. His favorite ship, the Lancaster, was on her return voyage from n with a cargo of great value, at the breaking out of the war of 1812. ide repeated applications for insurance, but the alarm was general and the offices refused to take a risk upon the ship and cargo for less '5 per cent. This was an enormous deduction ; but the ocean swarmed British cruisers, and the premium of insurance, considering the course Lancaster, could scarcely be regarded as unreasonable. Mr. Cope un- od his own affairs perfectly, and, satisfying himself that he could sustain s of the whole, and consequently that he could be his own insurer, he awaited the result, though each day's papers conveyed intelligence ortant inroads upon the mercantile marine of our country by British of war. The resolution, however, had been taken, after careful delib- , and the only course was a "patient waiting." And when darkness l to hang thickest upon the prospects of the merchants, the Lancaster l at Philadelphia, one evening, with her immensely valuable cargo, e captain received from the pilot, in the Delaware, the first intimation tilities between this country and Great Britain ; and he remarked, s should have hailed a British cruiser for the news, had one come within king" distance. The result of this was an immense profit upon the

eferring to Mr. Cope's mercantile career, we cannot omit to notice that the contemporary and often the rival of STEPHEN GIRARD. And we add, that he was on terms of intimacy and friendship with that re- ble man. It is another proof of Mr. Girard's sagacity, that he selected pe to be one of the executors of his will, and one of the trustees of nk. It happened that after discharging with fidelity the duties which and fellow merchant had thus devolved upon him, Mr. Cope, as a r of the Select Council of the city of Philadelphia, came to be, for a e President of the Board of Commissioners of the Girard estate ; and subsequently elected, by a select council, a director of the Girard s for Orphans, an honor which, to the regret of his colleagues, he im- ely declined.

rence has already been made to the public spirit of Mr. Cope, and to mptness and fidelity in every position to which he had been called by s of the people, and his exertions and contributions when his experi- id his wealth were required to ensure the commencement or comple- works of public interest. And we have already referred to his exer- o secure the introduction of wholesome water into the city of Phila-

delphia. To Mr. Cope, in an eminent degree, may be accorded the praise of bringing to a completion the Chesapeake and Delaware Canal ; and the citizens of Philadelphia are not likely soon to forget the promptness and the efficiency of his movements to secure the construction of the Pennsylvania Railroad. He presided at the town meeting called in support of that measure, so important to Philadelphia, and gave it the aid of his continued labor, and the most liberal subscription of any individual contributor.

It was the good fortune of the writer of this hasty notice to be a colleague of Mr. Cope in the convention which remodelled the Constitution of Pennsylvania, and testimony is cheerfully borne to the fidelity with which he guarded the interests and represented the principles of his immediate constituents by the wholesome conservatism of all his views, his remarks, and his votes ; and while he exhibited a thorough understanding of the nature and wants of our popular government, he manifested an earnest desire that the organic law of his native Commonwealth should be placed upon a basis which should not be shaken by every breeze of popular favor, or every tempest of popular dislike.

Though few of the institutions of Philadelphia are without the valuable aid, in some form, of Mr. Cope, yet his mercantile friends are permitted to enjoy the largest portion of his important services. He is the President of the "Board of Trade," where his person is always hailed with pleasure, and his opinions received with marked deference. But another institution, which is the pride of Philadelphia merchants, has been particularly favored by Mr. Cope. We allude to the Mercantile Library Company, of which he has long been the president, and from whose meetings he is very rarely absent. His own feelings seem to derive new freshness from his association with the younger members of that profession which he has honored ; and his pride, perhaps, is gratified by the evidences that his life is regarded as an example to those who, when he shall have ceased to be of their number, will be able to sustain the character of Philadelphia merchants.

In personal appearance, Mr. Cope is not without advantage. Of established health, the result of a sound constitution, assisted by temperate habits and constant exercise, his upright bearing, and firm, elastic step, seem as if they had been acquired in a military school, rather than under the guidance of a mother and schoolmaster of the Society of Friends. An anecdote may illustrate our meaning.

Some years since, Mr. Cope was travelling in the Western States with the late General Cadwalader, who was "every inch a general." On arriving at a hotel, the names of the travellers were of course registered. Having, perhaps, some business with, or, more probably, willing to be hospitable to General Cadwalader, a resident of the place where the travellers were spending the night, after examining the record of the names, stepped to the porch, and observing a gentleman walking up and down, with a quick, firm step, and wearing a surtout with an upright military collar, he thought he could not be deceived as it regarded the military title of the visitor, whom he immediately saluted as "General," and proceeded to introduce himself and his business. And it was not easy to satisfy him that he had mistaken a member of the "Society of Friends," in the full dress of that sect, for a "Major General."

No religious association, no weight of public duties, no cares and calculations of a mercantile life, not even the weight of more than eighty years, have deprived Mr. Cope of a buoyancy of spirits that makes his company

ow, as it was years ago, the delight of social gatherings. Though deeply touched by an event to which we shall refer hereafter, yet no man, within the limits of gentlemanly propriety, could add more to the zest of lively, pleasant conversation. Full of experience, full of anecdote, full of desire to promote kindly feelings, and to share in their exercise, his presence is always desirable, where pleasant wit and chastened humor are allowed their appropriate exercise. His presence brings no unpleasant restraints, though it may modify pleasure; and the young who are favored with his company at their occasional festivities, find their true enjoyment enhanced by the approval which his continuance among them manifests, and by the temperate gratification which that approval ensures. It is a matter of course that the character, conduct, and position of Mr. Cope should attract to him the high regard of the good and the venerable of his acquaintance; but it is an additional proof of the excellence of his temper, and the purity of his principles and of his taste, that the young love his presence, and court his approval.

Time is, indeed, laying his hand upon Mr. Cope, but the work is being done gently and kindly; and those who regard him as a representative of the former race of Philadelphia merchants, (a race to which all may look with reverence and pride,) handing down their virtues and their fame to his successors, rejoice in the promise, which his healthful appearance and active habits give, that he will for many years be spared to receive from his fellow-citizens those manifestations of grateful respect, which are so eminently deserved by the giver, and which do so much honor to the judgment of the givers.

We have purposely avoided direct reference to the domestic relations and circumstances of Mr. Cope, as unsuited to such a notice as this; though it is in the refined and simple elegance of his hospitable home that he is best understood and most beloved. But while we omit particular allusion to what has been his chief delight, and the pride and blessing of those who share his domestic circle, it may not be improper to say that a recent visitation of Providence has marked the age of Mr. Cope with an affliction for which there is only consolation, no remedy; a deprivation of a kind which none can estimate but those who can enter exactly into the father's feelings, and comprehend all the excellencies which centered in a daughter, whose death, in 1847, brought desolation to her domestic hearth, of which she was the ornament, and irremediable grief to the bosom of her relatives. We allude to the accomplished lady of Job R. Tyson, Esq., of Philadelphia, the youngest daughter of Mr. Cope, whose gifts were of the highest order, and whose attainments were of a kind that made their possessor the delight of the social circle, and rendered the hospitable mansion of her husband the pleasing sort of the gifted and the good.

We dare not pursue that subject closer, and we have only referred to the painful fact, that we might not omit so important an element in the later experience of one whose life we are noticing. We have referred to Mr. Cope as a merchant, enterprising, liberal, successful;—as a philanthropist, self-denying and devoted;—as a man, upright, respected, beloved. The single but signal instance of domestic affliction to which we have ventured to allude, is mentioned, that we might say that Mr. Cope has not been without his trials and the submission of a CHRISTIAN.

ART. II.—INTEREST OF MONEY :

BRIEF ACCOUNT OF OPINIONS AND PRACTICE CONCERNING INTEREST.

As to the laws or customs of most of the nations of antiquity, respecting the loan of money, we know little or nothing. We have, however, some information, that ought not to be slighted, as to the manner in which this subject was regarded and treated among the Greeks, the Romans, and the Jews.

Among the Greeks the rates of interest were left almost entirely free from legal interference. The only enactments in Athens relative thereto appear to have been the following :—1. "A banker shall demand no more interest-money than what he agreed for at first;" and, 2. "Let usurers' interest-money be moderate." (See *Potter's Antiquities of Greece*, ed. Prof. Anthon, p. 150.) The rate of interest on money loaned for the purpose of employment in foreign trade, was much higher than that on money used in domestic business. The rate in the latter case was ordinarily about 12 per cent per annum, while in the former 30 per cent was charged on each voyage, either to the Euxine or any Mediterranean port, (*Voyage d'Anacharsis*, Tom. iv., p. 371,) which charge, as two or three such voyages were often made in one year, was generally equivalent to 60 per cent or more per annum. This enormous rate was far from being so unreasonable as it may appear to most persons at first view, since the hazard was extreme, in those days of unskilful navigation and predatory habits, and the profits of prosperous mercantile adventures were proportionally exorbitant. Whether many of the Greeks were of opinion that these rates ought to be lowered by law, or there existed general unanimity as to the impolicy of legal restraints in this matter, we have no means of determining. We know, however, that the celebrated philosopher, Aristotle, pronounced *all* interest unnatural and unjustifiable, on the ground that coin in itself was barren, unlike corn, every grain of which is capable of producing many others.* In another passage, speaking of the various methods taken to acquire money, he says that agriculture and the breeding of cattle may be regarded as honorable and natural, since the earth itself and all animals are by nature fruitful; "but to make money from money, which is barren and unfruitful," he represents "to be the worst of all modes of accumulation, and the utmost corruption of artificial degeneracy. By commerce" (he says) "money is perverted from the purpose of exchange to that of gain. Still, however, this gain is obtained by the mutual transfer of different objects; but usury, by transferring merely the same object from one hand to another, generates money from money, and the interest thus generated is therefore called *σύνεσις*, (offspring,) as being precisely of the same nature, and of the same specific substance with that from which it proceeds." (*Polit. L. i., c. 6.*)

In Rome there was no law respecting interest for three centuries or more after the foundation of the city. The two principal Roman historians, Livy and Tacitus, differ as to the period when the first enactment on this subject took place, the latter making it one of the laws of the Twelve Tables, (*Tacit. Annal. L. vi., c. 16.*) while the former represents it to have been adopted in the year 398 from the building of the city, two tribunes being its proposers.

* *Polit. L. ii., c. 10.* Blackstone says, "This passage hath been suspected to be spurious." (*Comment. Book ii., c. 30, note, p. 454.*) We know of no ground for suspicion respecting it save its purport.

(Livy, L. vii., c. 16.) The laws of the Twelve Tables were enacted about the year 300. Tacitus is boldly pronounced in the wrong by Montesquieu, (*Esprit des Lois*, L. xxii., c. 22;) and, indeed, it must be admitted that such a law would proceed more naturally from the tribunes of the people than from the decemvirs, since the latter were of the aristocracy. Whensoever the law may have been enacted, it fixed the rate of interest at 1 per cent per annum. Ten years later, according to Livy, (L. vii., c. 27,) it was reduced to $\frac{1}{4}$ of 1 per cent; and the fact of the reduction is also stated by Tacitus, though he does not mention its date. (*Annal.* L. vi., c. 16.) Still later, all interest is said to have been prohibited. (Tacitus, *ibid.*, and compare Livy, L. vii., c. 42.) The exaction of interest was one main ground of the bitter quarrel which existed between the patrician and the plebeian orders in Rome. Tacitus terms it "that ancient calamity to the city, and frequent reason of seditions and discord." (L. vi., c. 16.) The laws against it were ineffectual. Livy speaks of it as growing more and more exorbitant, stinging the popular sensibility to the quick, and adding asperity to the public contests. (L. vii., c. 21.) Tacitus says, that many occasional enactments were made to suppress frauds, which however were always perpetrated in one way or another, new arts being devised to supply the place of those obviated. (L. vi., c. 16. See also L. xxxv., c. 7, and Cicero, *Epist. ad Atticum*, L. vi., Ep. 1.) Those who violated the laws were treated with great rigor. Fourfold the sum loaned was forfeited; while a thief forfeited only twice the value which he stole. (Cato on Agriculture. Compare Livy, L. vii., c. 28; L. x., c. 23; L. xxxv., c. 41.) Cato, the Censor, from whom we have this statement, exercised particular severity towards usurers in the public offices which he held. When he entered upon the government of Sardinia as prætor, he at once expelled every usurer from the island. (Livy, L. xxxii., c. 27.) Cicero tells us that when some one asked him what he thought of usury, his answer was, "What do I think of murder?" (Cicero, *De Off.*, L. ii., c. 25.) About a century before Christ, the prætor, A. Sempronius Asellus, having undertaken to enforce the laws in favor of debtors and against usurers, who had for some time practised their calling with impunity, was publicly murdered by the creditors. (Appian *De Bell. Civil.* L. i., c. 54, and Livy, *Epitome* of Lib. lxxiv.) Ten or fifteen years afterwards, the consul, Valerius Flaccus, was assassinated by his own lieutenant, chiefly because he was the author of a law allowing interest at the rate of 3 per cent per annum. (Velleius Paterculus, L. ii., c. 23. Compare Livy, *Epitome* L. lxxxii.) The historian, Paterculus, denominates this law a shameful one. A few years later still, we find Cicero charging Verres with usury at the rate of 24 per cent per annum. (Cicero in *Verrem*, Act. ii., L. iii., c. 70, seq.) At about the same period, in his letters to Atticus, he speaks of 12 per cent per annum as the common rate; which rate, compound interest, he himself established by an edict in Cilicia, when he was pro-consul of that province. (L. i., Ep. 12; v., Ep. 21; vi., Ep. 1 and 2.) One Scaptius, however, demanded, unsuccessfully, 48 per cent per annum on a loan made to the people of Salamis in Cyrus. (*Ibid.* except the first reference.) At the time of the death of Antony and Cleopatra, interest fell, we are told, one-third; i. e., it is supposed, to 4 per cent. (Dion Cassius, L. li., c. 21.) Yet, about this same period, Horace speaks of one who exacted 60 per cent. Suetonius mentions that Augustus stigmatized certain persons who made it a practice to borrow money at low rates and loan it at higher. (Suetonius, *Augustus*, c. 39.) The same author and Tacitus state, that in the reign of Tiberius there was a general tumult on ac-

count of the pressure of usury. (Id. Tiberius, c. 48. Tacitus, L. vi., c. 16, 17.) In the time of Pliny the Younger, 12 per cent was apparently the usual demand per annum. (Pliny, Ep. L. ix., Ep. 28., L. x., Ep. 62 or 55.) Finally, the Emperor Justinian, we are told by Gibbon, made 6 per cent the ordinary and legal rate, confined persons of high rank to 4, allowed 8 for the convenience of manufacturers and merchants, and 12 to nautical insurance; violations of these rules being rigorously punished. (Gibbon's Dec. and Fall of the Roman Empire.)

The Jewish law prohibited all usury between Jew and Jew, although it was allowed between Jews and foreigners. (Ex. 22 : 25 ; Levit. 25 : 36, 37 ; Deut. 23 : 19, 20. Compare Ps. 15 : 5 ; Ezek. 18 : 8, 13, 17, &c.) The reason of this distinction, according to Father Ambrose, was, that God designed usury as one of the ways of *making war* upon the Canaanites and other heathen nations.

The Canon Law, as it is called, i. e., the ecclesiastical law of the Roman Catholic Church, pronounces the taking of interest, even the least, to be a mortal sin, and declares those who defend the practice to be heretics. This prohibition is frequently enforced in the writings of the Fathers of the Church, and it was adopted and maintained by the schoolmen. It was grounded mainly on the laws of the Old Testament and the authority of Aristotle. The deference paid to the latter, by the schoolmen in particular, was extreme; equal to that which they paid to the Bible.

Says Dugald Stewart: "In consequence of this prohibition in the Mosaic law, the primitive Christians, conceiving that they ought to look on all men, both Jews and Gentiles, as *brethren*, inferred (partly perhaps from the prohibition given by Moses, and partly from the general prejudices then prevalent against usury) that it was against the Christian law to take interest from any man. And, accordingly, there is no crime against which the Fathers, in their homilies, declaim with more vehemence. The same abhorrence of usury of every kind appears in the canon law, inasmuch that the penalty by that law is excommunication; nor is the usurer allowed burial until he has made restitution of what he got by usury, or security is given that restitution shall be made after his death." (Stewart's Philos. of the Act. and Mor. Powers of Man, Boston ed., vol. I., p. 139.)

Civil statutes were early and frequently enacted in the principal States of Europe, for the purpose of suppressing usury. The business of loaning money, thus rendered dangerous and disreputable, was chiefly confined to the Jews and the Lombards, (a name often given in Europe at that time to the Italian merchants generally.) The Jews were noted for usurious dealings so early as the 6th century. (Gregory of Tours, L. iv., c. 12, and L. vii., c. 23.) In the early part of the 13th century, the Lombards began to pursue the business of making loans on interest. (Hallam's Middle Ages, c. 9, Part 2.) The rates exacted by lenders in the Middle Ages were proportioned to the risk and disgrace which they encountered, and to the general insecurity of their possessions and their claims. They were treated with extreme severity. The laws of Charlemagne, in the 8th century, prohibited their occupation. By the laws of King Alfred, about 900 A. D., their personal effects were forfeited to the king, their land and other property to the lords from whom they held them, and they were denied burial in consecrated ground. The laws of Edward the Confessor, enacted about 1050 A. D., contained similar provisions. Philip Augustus, king of France, (A. D. 1180,) released the Christians in his dominions from their debts to the Jews, reserving a fifth part to

self. The monarchs of Europe, finding the growing privileges of their subjects to stand in the way of the exercise of their rapacity on them, often resorted to extortion from the Jews, as an easy mode of obtaining both money and popular favor. Philip shortly after banished all Jews from the kingdom, at the same time confiscating their effects. They appear to have purchased their return. In England, a few years later, at the accession of Richard I. to the throne, the Jews underwent the most cruel persecution. (ume's Hist. of England, c. x. Mackintosh, c. III.) It being incorrectly ascertained in London, on the day of Richard's coronation, that he had ordered Jews to be slain, vast numbers of them were massacred in the streets and their houses, and their property was plundered or burnt. Neither men, women, nor children were spared. The example was followed in other cities. In York, 500 Jews, who had retired to the castle to defend themselves, pairing off of safety, murdered their own wives and children, threw their dead bodies over the walls upon the besieging mob, and then, setting fire to the houses, perished in the flames. In the reign of John, Richard's successor, Jews were subjected to the severest extortion. Of a considerable number whom he imprisoned in order to obtain possession of their wealth, there were few who had not at least an eye put out. (Stowe's Survey of London, x III., p. 54.) He ordered a tooth to be drawn each day from the head of one of them, until he should consent to pay the sum of 10,000 marks, a vast enormous sum in those times. Seven teeth were thus wrenched out. The extraction of the eighth was stopped by the compliance of the sufferer. Henry III., the succeeding monarch, extorted from a single Jew of York, named Aaron, 14,000 marks of silver for himself, and 10,000 for the queen. In the early part of the reign of Edward I., the next sovereign, the Jews were driven from England, 15,000 of them being banished at one time, and their property being all taken from them.

A strange custom had by this time begun to prevail in France, of confiscating the effects of all Jews who embraced Christianity. Says Montesquieu: "their property was confiscated when they were willing to become Christians; and they were burnt at the stake when they refused to do so." (Esprit des Loix, L. XXI., c. 16.) He considers this forfeiture as a sort of revenge upon the Jews for eluding the royal and other exactions by embracing Christianity. In the reign of St. Louis of France, the Jews were exiled and killed several times. One of his ordinances declares that "for the salvation of his own soul and the souls of his ancestors, he releases to all Christians the third part of what was owing by them to the Jews." (Martenne, Thes. Annot. T. I., p. 984.) In the reign of Charles VI., they were finally banished from the kingdom, and never regularly recalled. In Spain and in the Mohammedan countries, in Spain especially, they were much better treated, but still subject to heavy taxation, civil disabilities, and degrees of dishonor.

Religious hatred undoubtedly had something to do with this persecution; but the principal incentives to it were the occupation of the Jews as money-lenders, and the wants and rapacity of the monarchs of Europe, who, as I have remarked of the kings of France, employed the usurers as a sponge to pick up the money of their subjects, which was then to pass into their own hands. If this sponge was not drained to the last drop by royal pressure, it was scarcely because of any want of endeavor to that effect. Yet they retained vast resources in spite of these astonishing cruelties to which I have alluded. The representations of history in this matter can be ex-

plained, we think, only by supposing that the Jews acted in the capacity of brokers for others to a much greater extent than as lenders of their own money. Reputable persons of wealth probably employed Jewish agents in the profitable disposal of such sums as they wished to loan. Only the dregs of the people in early times were willing to encounter the odium of usury, and the Jews were already infamous, on account of their religion. No doubt, however, they derived very large gains from their performance of what was considered one of the basest offices of society. From the early part of the 13th century, when the Italian merchants began to share with the Jews the business of loans, it gradually became less ignominious. Moderate and excessive interest were soon distinguished from each other in many countries by general opinion, and by legal regulation, although the Romish hierarchy pertinaciously pronounced all interest sin. Says Dugald Stewart :—"About the middle of the 17th century we find the divines of the Church of England very often preaching against all interest for the use of money, even that which the law allowed, as a gross immorality. And not much earlier it was the general opinion, both of divines and lawyers, that, although law permitted a certain rate of interest to prevent greater evils, and in compliance with the general corruption of men, (as the law of Moses permitted polygamy, and authorized divorce for slight causes, among the Jews,) yet that the rules of morality did not sanction the taking *any interest* for money, at least that it was a very doubtful point whether they did. The same opinion was maintained in the English House of Commons by some of the members who were lawyers, in the debate upon a bill brought in not much more than a hundred years ago." (Stewart's *Philos. of the Active and Mor. Powers of Man*, vol. I., p. 139.) Near the beginning of the 18th century, Dr. Thomas Wilson, Bishop of the Isle of Man, recommended the punishment of usury by death. "For my part," says he, "I will wish some *penal law of death* to be made against those usurers, as well as against thieves or murderers ; for that they deserve death much more than such men doe. For these usurers destroye and devour up, not onlie whole families, but also whole countries, and bring all folke to beggary that have to doe with them."*

During the Middle Ages the established rates of interest were in general, as has been already intimated, extremely high. At Verona, in 1228, it was fixed at 12½ per cent. (Muratori, *Dissert.* 16.) In 1242, James I. made the legal rate in Arragon 18 per cent. (Robertson's *Charles V.*, Note 30.) Even higher rates were paid. The Countess of Flanders paid from 20 to 30 per cent for the money which she borrowed about the beginning of the

* The ensuing statement is made by Mr. Stewart :—"A learned gentleman of the Middle Temple, Mr. Plowden, (a lawyer, I believe, of the Roman Catholic persuasion,) who published, about 30 years ago, a Treatise upon the *Law of Usury and Annuities*, has employed no less than fifty-nine pages of his work in considering the law of usury in a *spiritual view*, in order to establish the following conclusion :—"That it is not sinful, but lawful, for a British subject to receive legal interest for the money he may lend, whether he receive it in annual dividends from the public, or in interest from private individuals, who may have borrowed it upon mortgage, bond, or otherwise." Mr. Necker, too, in the Notes annexed to his *Eloge de Colbert*, thought it necessary for him to offer an apology to the Church of Rome for the freedom with which he ventured to write upon this critical subject. '*Ce que je dis d'interet est sous un point de vue politique, et na point de rapport, avec les respectables maximes de la religion sur ce point*.'—What I say of interest is under a political aspect, and has no relation to the venerable maxims of religion on this point." (Stewart's *Act. and Mor. Powers of Man*, vol. I., p. 140. Note.)

teenth century, to defray her husband's ransom. (Martenne, *Thes. Anlot.* Tom. i., p. 886.) Philip Augustus, king of France, limited interest to 10 per cent, about the same time. Matthew Paris states that in England, in the reign of Henry III., 10 per cent was paid every two months, i. e., 60 per cent per annum. (Muratori, *Dissert.* 16.) In France, in 1311, Philip the Fair issued an ordinance allowing 20 per cent. (Du Cange, V. *Usura*, *Ordonn.* Tom. i., p. 484.) In 1336, the Florentines borrowed money for which they agreed to pay 15 per cent. (G. Villani, *Florentine Hist.* L. xi., c. 49.) In 1360, King John II. of France issued letters patent authorizing the Jews to take interest at the rate of more than 80 per cent per annum. (Say's *Dict. Econ.* Book II., c. 8.) Towards the end of the fourteenth century, however, the republic of Genoa paid only from 7 to 10 per cent to its creditors. (Bizarri, *Hist. Genuens.* p. 797.) In 1435, the rate of discount on bills was 10 per cent at Barcelona. (Capmany, *Mem. Hist. de Barc.* T. i., p. 209.) In 1490, the rate of interest in Placentia is said to have been 40 per cent per annum. (Robertson's *Charles V.* Note 30.) It is stated by Robertson, in his *History of Charles V.*, that during the war excited by the League of Cambray, formed in 1508, while Charles VIII. of France could not procure money at a less premium than 42 per cent, the Venetians lent what sums they pleased at 5 per cent. (Robertson's *Charles V.* View of the State of Europe.)

The Emperor Charles V. fixed the annual rate of interest in his Low Country dominions at 12 per cent; and in the year 1560, more was exacted. (Robertson's *Charles V.* Note 30.) At a still later period, as Grotius informs us, (*De Jur. Bell. et Pac.* 2, 12, 22,) interest in Holland was at 8 per cent in common loans, and 12 to merchants. It has since decreased very much, and is now as low as 3 or 4 per cent.

In France, in 1720, legal interest was 5 per cent. It was then reduced to 4 per cent. In 1724 it was raised to $3\frac{1}{4}$ per cent, and in 1725 to 5 per cent. During the administration of M. Laverdy, in 1766, it was reduced to 4 per cent. The Abbe Ferras afterwards raised it again to 5 per cent. (A. Smith's *Wealth of Nations*, Book I., c. 9.)

The laws of England did not countenance the taking of any interest until the 37th year of Henry VIII., 1546, when a statute was enacted, fixing interest at 10 per cent per annum, (c. 9.) This statute was repealed in 1552, in the reign of Edward VI., (5 and 6 Edw. VI., c. 20,) and all interest again prohibited. In 1571, in the 13th year of Elizabeth's reign, (c. 8,) the statute of 5 and 6 Edward VI. was repealed, and that of 37 Henry VIII. re-enacted. In the 21st year of James I., the legal rate of interest was reduced to 8 per cent, (c. 17,) with the provision, "that this statute shall not be construed or expounded to allow the practice of usury in point of religion or conscience." (Paley's *Mor. and Polit. Philos.* Book III., Part I., chap. 10, note.) During the Commonwealth, (in 1650,) it was lowered to 6 per cent; and after the Restoration, in the 12th year of the reign of Charles II., (2 Car. II., c. 13,) the reduction was re-enacted. The statute 12th year of Queen Anne, (Lt. 2. c. 16,) reduced it to 5 per cent; and this statute is now in force. The penalty of its infraction is the forfeiture of treble the value of the money lent. If, however, the contract be made in a foreign country, the laws of England will enforce it according to the laws of that country.

The Koran forbids all interest. But extravagant rates are exacted in Mohammedan countries, in violation of law. Sir J. Child states, that at the time when he wrote, (the close of the 17th century,) the rate of interest in

Turkey was 20 per cent. A century later, Mr. Bentham states 30 per cent to be a common rate in Constantinople. In Hindostan, Adam Smith says, interest was frequently in his day as high as 40, 50, and 60 per cent. Mr. Bentham, some years later, states the lowest interest in that country to have been 10 or 12 per cent, and pretty commonly as high as 40. In China interest varies from 12 to 30 per cent.

Most of the United States possess laws of a restrictive character respecting the interest of money. It is perhaps hardly worth while to enter upon a minute statement of the various provisions which these laws contain. Such a statement would demand considerable research, and would probably yield no great advantage in return. In New York the highest legal rate of interest is 7 per cent. In Massachusetts, and the other New England States, it is 6 per cent. In practice, however, as all know, the law of interest is nearly a dead letter among us, except as to cases in which no rate is stipulated. In Wisconsin a law has just been passed freeing interest from the usual limitation. Both branches of the Legislature have, by decided majorities, enacted as follows:—"Sec. 1. Any rate of interest agreed upon by parties in contract shall be legal and valid. Sec. 2. When no rate of interest is agreed upon or specified in a note or other contract, seven per cent per annum shall be the legal rate."

ART. III.—TRUE THEORY OF CAPITAL AND LABOR.

THE most important subject that can possibly occupy public attention at present, is the true relationship subsisting between capital and labor. This is the more necessary at this time, because the world has arrived at a political and social crisis, when the existence of society itself is in peril, because this subject is not sufficiently understood. It must be admitted that most of the movements of the day are ostensibly of a political character, but there is also no doubt that they are generally of an economical origin. There is an immense amount of wealth in the world, at the same time that poverty is increasing. This, to the common observer, appears to be incongruous and unjust, not surmising that moral and economical laws are equally fixed and *immutable* as the physical laws of the universe. Malthus, McCulloch, and others, have at various times laid down a few disjointed principles, by which an acute observer might infer that the increase of capital is in an inverse ratio to that of population; but for lack of a correct definition of the nature of capital, and a due consideration of some of the most important principles of nature which bear upon the subject, it has neither been correctly understood nor sufficiently acknowledged. Some of these writers have egregiously blundered in laying down principles, contradictory, in some instances, to their main conclusions. Malthus, while he maintained that population constantly increased beyond the means of the supply of food, also maintained that a country could only prosper and increase in wealth while it had the means of exporting grain; an assertion which history and experience have proved to be entirely fallacious. McCulloch, also, while endorsing the same principle, maintained that a tax upon the importation of grain was necessary for the protection and prosperity of the farmers and land-owners of Great Britain, in consideration of their paying more than their just proportion of the poor tax; which, by-the-by, was one of the legitimate results of the tax on

grain. But to our subject. Political economists in general, in their anxiety to extol the value of the operations of labor, have lost sight of the circumstance that labor *itself* can neither originate *profit* nor produce *capital*—labor, at best, is only the increaser and modifier of capital. For one thing is perfectly obvious, that capital is the foundation upon which all labor is built, and the material by which all labor operates. Capital must, therefore, be at all times pre-existent, or labor cannot proceed—the quantity of capital always regulating the amount of profit obtained. But let us give an example. Suppose two portions of land to be cultivated, *exactly* in the same manner; the one producing fifty bushels of grain, and the other *only* twenty-five—the *natural* profit of labor in one case, would be just double the amount that it would be in the other; and this principle will be found to operate through all the ramifications of capital and labor. There must, therefore, be at all times an equal amount of capital *ready* and *convenient*, as the demand for labor increases, or the profits of labor will diminish, and the condition of the laborer be necessarily deteriorated. Before we proceed further, it may be necessary to define what we understand by the term *capital*. Capital and wealth are too often confounded as one and the same thing, when in many instances no two things can be much more distinct. Capital is simply the *original* stock upon which individuals or companies have to commence business. The earth was the original, and is still the principal capital of society—wealth is only capital, so far as it facilitates and can be used for reproduction. It will be necessary to keep these circumstances constantly in view, or we shall be in danger, like some of our cotemporaries, of arriving at false conclusions. In a general point of view, money is only to a *small* extent capital—no further than it facilitates the operations of society, and consequently saves time and labor. Society is not, therefore, *interested in the greater or less amount* of money in circulation, providing that amount be sufficient, as a general medium, to pass other commodities from hand to hand, and its quantity is sufficiently stationary to create no unnecessary fluctuations in prices. Paper money is therefore, *for the most part*, not only useless and unnecessary, but extremely injurious when it causes such fluctuations. Money should only increase in a *natural* ratio, or at the same rate as other commodities; and if none but the precious metals were used, there is little doubt but this would be the case—the operations of society would be more regular and certain, and consequently more profitable both to laborer and capitalist. Capital is generally divided into two kinds, fixed and moveable, or fixed and circulating. It is this division, without a proper distinction being made between capital and wealth, which has caused such a confusion of ideas in the public mind upon the subject. The assumption, that *all* wealth is capital, and can therefore be employed to a profit under any circumstances, at the option of its possessor, has caused more dissatisfaction in society than any other mistake in the whole range of political economy. It is asserted by many benevolent individuals, who are in the habit of declaiming upon the wrongs and miseries of the laboring classes, that an immense amount of capital is at present in existence, beyond the *relative* amount of any previous period; but this is an assertion without due consideration—according to *them*, labor is crushed by the superabundant weight of capital. That a larger *relative* amount of circulating capital is necessary for the interests of civilization and the employment of the people, as society advances, none will deny who have carefully looked into the matter; but we must not forget, that under these circumstances the *relative* amount of fixed

capital must *decrease* as a necessary consequence of the increase of circulating. Thus, as society advances, the increase of capital is more apparent than real. Capital, like snow upon a given surface, may be rolled together in heaps, but if we were to assert that the relative quantity were increased by this operation, we should be deservedly laughed at; we should also be laughed at, if we were to assert that the snow-balls could not be increased in size by rolling them upon a larger surface, without increasing the relative quantity of snow to the extent of land it covered. It would be well for persons who are dissatisfied with the present position and arrangements of society, to examine these subjects carefully, then they would not only be more capable of appreciating the circumstances themselves, but also of directing others. Very few persons would be willing to hazard the assertion, that capitalists were not, ordinarily speaking, selfish men, and were not continually looking out for opportunities of making profit; nor that money, or any other kind of capital, could be accumulated without the operation of labor. If capital be suffered to lie idle, like labor it is subject to decay and loss; it is therefore only reasonable to suppose, that it is never suffered to lie idle when its owner can see an opportunity of obtaining profit. This prejudice against capital and capitalists is therefore perfectly unfounded. It may be supposed by some, that a gratuitous or forced employment of some of the apparent surplus, would at times be beneficial; but when it is remembered that this expenditure without profit must also assume the shape of charity, and could only temporarily benefit the receivers, while it permanently injured *all*, it is undesirable and inadmissible. It would not only sap the foundation of the independence of the operative, by making a dependence on charity less repugnant to his feelings, but it would permanently lower wages and profits. But if we were to admit, merely for argument's sake, the immense increase of capital contended for, it would in no way assist us to the conclusion, that less selfishness on the part of the capitalist would be beneficial to society, unless it were accompanied with more prudence and economy on the part of the laboring class—if capital were suffered to decrease, while the numbers of society augmented, the consequences would indeed be fatal. Ignorance, then, must be considered the main cause of all the evils complained of. The inequality of production between agriculture and manufactures, the fluctuations incident to the seasons, under an *universal* system of monopoly in commerce, added to the arbitrary fluctuations in the value of money, caused by a vicious system of banking and money making throughout the world, have been quite sufficient to produce all the evils which exist in society, without imputing more than an ordinary share of selfishness to the capitalist, or supposing the accumulation of capital to be an evil. Whatever may be surmised to the contrary, the real interest of capital and labor are *one*, as an increase of capital must inevitably produce an increased demand for labor. The great difficulty then, which remains to be solved, is the cause of the inadequate remuneration of labor, and the unequal distribution of wealth. In one point of view, capital has greatly the advantage of labor. The laborer must be fed, clothed, and sheltered, whether he be in active operation or not; while capital *generally* requires little expense to keep it together, and none to maintain it. Thus labor is naturally in the weakest position, and in cases of sudden cessation in the usual demand, its value must necessarily decrease, as it cannot, like capital, subsist upon a part of itself; and as there is a constant tendency in labor to increase in a greater ratio than capital, its value never afterwards rises under ordinary circum-

stances. All fluctuations in trade should therefore be avoided as much as possible, as the greatest evils that can befall the working man and society in general. Adam Smith perceived the tendency in circulating capital to collect itself into large masses, and also that its value decreased, as measured in interest or usury, as society advanced. He therefore supposed that its relative increase was greater than that of population. To this circumstance he attributes its decrease in value. In this, however, he was mistaken—the decrease in the value of circulating capital arises from causes entirely distinct from the relative increase or decrease of population—causes which, nevertheless, are deeply implanted in the principles of nature, and therefore cannot be altered by the machinations of man. It will be found, also, that the causes which operate to decrease the value of circulating capital, have the same effect upon the value of labor. Let us now examine these principles. What is man? “All flesh is grass,” says the Apostle Peter. And this is a physical truth which cannot be denied. All animal matter arises from, and is dependent upon the vegetable kingdom for the support and continuance of its existence. The population of the earth is therefore abstracted from the original fertility of the soil, and it becomes less able, as cultivation continues, to return a profit beyond the labor and capital invested, with every increase of people. This may be thought strange doctrine, but it is nevertheless true. We may encourage the practice of what is called *agricultural chemistry*, we may use artificial manures and improved machinery, but the profits produced by these means are not all clear; the extra labor required for these purposes must be paid for out of the increased production; it is therefore next to impossible that the profits should ever be equal to those obtained from the cultivation of a virgin soil. But there are other circumstances to be taken into consideration, which cause the rate of interest upon circulating capital continually to decrease as well as the wages of labor. As society advances the best qualities of land are cultivated first, and the best locations taken; so that, as the demand for food and labor increases, society has fewer natural advantages to appropriate; and as these natural advantages (as previously shown) regulate and limit the rate of profit upon labor, and all other capital, the circumstances of society have a tendency to straighten with every step of its advancement. The natural principle of increase in man remains the same as it was thousands of years ago; and as the velocity of a solid body increases as it descends, so the force of the populative principle increases with every increase of people. This proposition is so simple and self-evident that it is almost superfluous to say more upon the subject. Suppose the population of the United States, at this moment, to be twenty millions, and suppose it to double in thirty years; it would stand thus in 1879, forty millions; and in 1909, eighty millions. Under these circumstances, shall we be able to produce the same relative amount of food and other conveniences? History hitherto answers no. Under these considerations we need not be astonished at the present condition of the European populations, nor need we wonder at the rapid approximation of the American people to the same condition. The profits of labor and circulating capital, as we have stated, must at all times be limited by the amount of profit derived from the application of capital and labor to the cultivation of the soil; therefore, whatever limits his profit must of necessity be injurious to the public, by stinting the necessary increase of means, for the maintenance of a constantly and rapidly increasing population. In this view, the congregation of large masses of people upon limited sites, beyond a certain extent, must be injurious to the

general interests ; decreasing the rate of profit, both upon capital and labor, for the exclusive benefit of the land-owners in the immediate neighborhood. Under these circumstances it is obvious that no exclusive privileges ought to be granted to capitalists for the purpose of forcing on and increasing the manufacturing system, for poverty and misery will certainly follow as a part of the effect of these privileges. The experience of the world places this truth beyond contradiction. Under such circumstances, the increased demand for the necessities of life naturally increases the price of those necessities, until it becomes the interest of parties to bring them from a greater distance, the price being sufficiently high to pay the cost of carriage, over and above that of production. A loss accrues in this way both to capitalist and laborer, which goes, as I have said, exclusively into the pocket of the land-owner in the immediate neighborhood of the manufacturing population ; the price being the same in the market for a bushel of grain grown *one* mile from a city, as it is for a bushel which has been carried a thousand. It may be said that this loss is partly made up by the increased facilities which large cities afford for producing manufactures ; by convenience of location, superior divisions of labor, and improved machinery. Although we are willing to admit this, to a certain extent, yet if we trace these circumstances from cause to effect, we shall find that the powers of invention and improvement are propelled, by interest and necessity, just in the same ratio as the price of food and other necessities increase ; it is therefore, for the most part, only a deadly strife on the part of the manufacturer to create artificial wants, and impel the producer of food to more extended exertion. Thus, while the price of food increases, whether measured in money or labor, the price of labor diminishes, until the laborer becomes a mere serf to the power he has created. But the capitalist does not escape *scot free* in this grinding operation ; the large capitalists have the advantage over the small ones in this race of competition, and are continually swallowing them up, especially in old settled countries, where nothing is more common than to see men who formerly have lived respectably upon a small capital with moderate exertion, reduced to the ranks of labor, and even to a dependence upon the poor's rate for support. In those countries we hear it continually said, and with truth, that the rich become *richer*, and the poor, poorer. It is almost unnecessary to say, that the same causes must produce the same effects ; and that *we* are fast approximating to the same condition as other nations. It has been shown, and must be admitted by all who have carefully examined the subject, that there is a constant and *natural* tendency in population to increase in a greater ratio than capital ;* therefore, as a consequence of this circumstance, the profits of capital and labor decrease as society proceeds. I know that this result has been flouted, combatted, and denied, but it has never yet been disproved. Ultra-benevolent parties, believers and unbelievers, both reason much in the same way upon this subject, and with much the same result.

* Our definition of the word *capital* must here be borne in mind : *that that part of wealth only is capital, which is, and can be applied to reproduction.* For instance, suppose a man had a thousand coats ; if he could not sell them without reducing the price of coats in the market, one of two things must result. He must either keep them, throwing out of employment, for the time, the workmen who made them, until they were consumed in the natural course of trade, or he must force them into the market for the same return which the community was prepared to pay for all the coats required, without this extra thousand—permanently reducing the wages of labor, and the profits of capital employed in the making of coats. These coats would no doubt be *wealth* to the community, and *capital* in the hands of the person who possessed them ; but the manufacturing part of the community would be permanently injured by their forced consumption, without a corresponding benefit to the rest, because no absolute return would be made to the funds of society for that consumption ; therefore these coats would not be capital.

One believes that the works of Nature have an uniform fitness and adaptation to the ends required, and therefore no discrepancy of this kind can possibly exist ; the fault, according to him, lies in an unequal and unjust distribution. The other party simply believes, that an all-wise and benevolent Creator would never send mouths without sending food ; so he comes to the same conclusion. For my part, I am not willing to accept the abstract theory of either party, but to take the facts as they present themselves, and fearlessly inquire into their causes and effects, and decide according to evidence ; for nothing but *truth* can assist mankind out of their present difficulties. Popular ignorance and prejudice, upon these important subjects, have been the greatest preventives to social progress. - While the conservative party is continually in fear that the popular movement may push things to an extreme, the movement party expect and ask too much, as the result of their own principles. The progress of social science, or political economy as it is called, has been extremely slow since its first development, though its final triumph is by no means doubtful. Mankind have hitherto been unwilling, not only to adopt its maxims as principles of action, but even to examine them and test their truth ; forgetting that all sciences in their incipient state must necessarily be imperfect. In examining all other sciences, we are willing to abide by experience and well-attested facts ; but in the science of political economy we are ever ready to jump to conclusions the opposite of truth, without the least consideration—we appeal to our feelings rather than to our reason, and suppose that the great Author of Nature could never do anything so anomalous as to make man, individually and collectively, dependent upon his own prudence, morality, and industry, for his support and happiness ; but rather, that he ought to be allowed blindly to follow the bent of his animal propensities and instincts, instead of his reason and experience. This is the great stumbling-block—the giant cause of all our evils. In the indulgence of our infidel feelings, we deny *design* in the Creator, and forget that His command was to “multiply and replenish the earth.” It would indeed be easy to prove that this design and command will be most rigorously carried out, whether mankind choose to acknowledge and act upon it with prudence or not ; but it is no doubt superfluous to do so in the present advanced state of the world, though it may be useful to remind us of such a design, and in consequence a Designer. But I am digressing too far from my subject. After what has been already said, it is almost unnecessary to remark again, that *all fluctuations are evil*, and whatever causes an inconstancy in the supply in the necessities of life, has a tendency to decrease the profits of capital and labor ; but with this difference, the depression on the profits of capital is generally *only* a temporary affair, while that on the wages of labor is *steadfast* and permanent. This arises from the necessary difference in the circumstances of each, as before explained ;—labor requires maintaining, while capital needs only to be kept together. Upon the least cessation of the usual demand for labor, from any cause whatever, the laborer's necessities being the same as before, he naturally bids against his neighbor for employment, and down comes wages. The inequalities of the seasons require to be *ceased* and *neutralized* by the *freest* and most extended commerce—the *constant* tendency of population to increase in a greater ratio than capital, requires to be modified by integrity, prudence, and morality—and the *monetary* fluctuations of commerce, by better laws and regulations than have hitherto been applied or discovered. Then society may prosper, and the present unfounded prejudice against capital may cease.

R. S.

ART. IV.—COMMERCIAL CITIES AND TOWNS OF THE UNITED STATES.**NUMBER XVI.****THE CITY OF SAVANNAH, GEORGIA.***

SAVANNAH is situated on the south side of the river of the same name. Its site is on a dry bluff, elevated some forty feet above low water mark; about twelve miles, in a direct line, from the ocean, and about eighteen miles by the course of the river.

"This bluff is composed of sand, with here and there a narrow vein of clay running irregularly through it. In some places, beneath the surface, the sand is discolored by iron. It is believed that there is not an equal elevation so near the sea, between New York and the Isthmus of Darien. Fine water is obtained by penetrating twenty to thirty feet in the sand. From east to west the bluff extends along the river upwards of a mile, terminating abruptly at either extremity. There is a very gentle and regular declivity to the south for several miles. Opposite the city lies Hutchinson's Island, the soil of which is alluvial, and in the language of the country is called tide swamp. The city is bounded on the east and west by similar lands. The ordinary elevation of the tides opposite the city is about eight feet. The salt water approaches usually within four or five miles of Savannah.

"Soon after passing the city, in its course to the ocean, the river is divided into numerous channels by small islands of marsh, the beautiful and delicate green of which, interspersed in the waters, affords, when viewed from the north-eastern extremity of the bluff, in a summer's afternoon, one of the softest scenes which I have ever beheld."†

The bar at the mouth of Savannah river is about eighteen miles from the city, and has on it a greater depth of water than any on the southern coast. Its channel is from half to three-quarters of a mile in width.

In the year 1836, an examination of all the bars from Charleston to St. Mary's was made, under an order from the Secretary of the Navy, by Captains Woolsey, Claxton, and Shubrick, of the Navy. Their report to the Secretary is as follows:—

"The bar at the mouth of the Savannah river is the deepest and most accessible of any on the southern coast. The average depth is 19 feet at low water; hence with a full tide (25 feet) a frigate may pass in in safety."

Just inside of the bar is situate Tybee Island, abreast of which, about four miles from the bar, is good anchorage in 5 to 6 fathoms of water. Up to this point can be brought 25 feet at high water. From this anchorage ground to "Venus' Point" (9 miles from the city) there is a depth of 18 feet; from the "Point" to "Five Fathom" ($2\frac{1}{2}$ miles from the city) there is a depth of 17 feet; and from "Five Fathom" to town there is a depth of 15 feet.

Of lights, the port of Savannah has the following:—

* We are indebted to the kindness of JOSEPH BANCROFT, Esq., of Savannah, (Geo.), for a copy of a pamphlet prepared by that gentleman, under the appointment of a Committee of the City Council of Savannah, giving the census of that city, with a great variety of historical and statistical matter, touching the institutions, commerce, resources, &c., of the city, from which we have made up the present article, which is little more than a mere condensation of the "figures and facts" so carefully gathered by Mr. Bancroft. "Savannah," we quote from the author's preface, "is here presented in a light which must excite the admiration of all those whose destiny is linked with hers. Her course is manifestly onward, and the exercise of ordinary energy and prudence is alone necessary to place her in that rank to which she is entitled by her deep and accessible bar, her noble railroad, and the extensive and fertile back country, whose products must mainly find an exit from her harbor."

† Daniell, M. D., on the Topography of Savannah.

A floating light off "Martin's Industry," about 15 miles north-east from Tybee, moored in 6 fathoms.

Two light-houses on Tybee Island, the principal one of which is on a structure 112 feet high. The other is a beacon light, 56 feet high.

A light-house on the eastern end of Fig Island, about 2 miles from town.

A floating light on the "Head of the Knoll," about 4 miles inside the bar.

A light-house on the point of Cockspur Island, 5 miles inside the bar; and another on the "Oyster Beds," 6 miles inside the bar.

Savannah is situated in north latitude $32^{\circ} 4' 56''$, west longitude $81^{\circ} 8' 18''$ from Greenwich, and $4^{\circ} 8' 54''$ west longitude from Washington City. One hundred and fifty-eight miles E. S. E. from the capital of the State, Milledgeville; 120 S. S. E. from Augusta; 190 E. S. E. from Macon; 90 W. S. W. from Charleston, and 662 from Washington.

The city of Savannah is open and spacious, being divided by numerous and wide streets and lanes, intersecting each other at right angles, with large squares at regular distances.

HISTORICAL NOTICES OF SAVANNAH.

The first settlement of Savannah was made in the month of February, 1733, by General Oglethorpe and some 30 families. On the 7th of July following, the settlers assembled on the strand (the bay) for the purpose of designating the lots. In a devotional service they united in thanksgiving to God, "that the lines had fallen to them in a pleasant place, and that they were about to have a good heritage." The wards and tithings were then named, each ward consisting of four tithings, and each tithing of ten houses, and a house and lot was given to each freeholder.

After a dinner, provided by the governor, the grant of a Court of Record was read, and the officers were appointed. The session of the magistrates was then held, a jury empaneled, and a case tried. This jury was the first empaneled in Georgia.

The town was governed by three bailiffs, and had a recorder, register, and a town court, holden every six weeks, where all matters, civil and criminal, were decided by grand and petit juries, as in England. No lawyers were allowed to plead for hire, nor attorneys to take money, but (as in old times in England) every man could plead his own cause.

In October, 1741, the government of the colony was changed from bailiffs to trustees.

In 1750, the number of white persons in *Georgia* was computed at about 1,500.

The first Royal Governor of Georgia, John Reynolds, Esq., arrived in Savannah in October, 1754.

The first printing press was established in 1763, and the "Georgia Gazette" printed on the 7th April of that year.

Robert Bolton, Esq., the first Postmaster of Savannah, was appointed in 1764, by Benjamin Barron, Esq., Postmaster General of the Southern District of America.

In 1766, the city consisted of 400 dwelling houses, a church, an independent meeting house, a council house, a court house, and a filature.

In 1770, the city extended on the west to what is now Jefferson-street, on the east to what is now Lincoln-street, and on the south to what is now South Broad-street; and contained six squares and twelve streets, besides the Bay.

On the 5th June, 1775, the first liberty pole was erected in Savannah, at Peter Tondee's, who kept a public house on the spot now occupied by Smet's new stores.

The first attack by the British on Savannah was made on the 3d March, 1776. It ended in the discomfiture of the regulars, under Majors Maitland and Grant.

On the 29th December, 1778, Savannah was taken by the British.

In October, 1779, an unsuccessful attempt was made by the French and American armies to recapture Savannah from the British. Count D'Estaing and General Lincoln were the commanders. Six hundred and thirty-seven of the French, and two hundred and forty-one of the continentals and militia were killed and wounded. In this attack Pulaski fell. The spot where he was shot down is about one hundred rods from the present depot of the Central Railroad.

The head-quarters of the English, while in Savannah, were at the house on Broughton-street, now occupied by S. C. Dunning, Esq.

On the 11th July, 1783, Savannah was formally given up by the British to the Americans, and Colonel James Jackson, (afterwards Governor Jackson,) the father of the present Colonel Joseph W. Jackson, was selected by General Wayne to receive the surrender of the same from the British commander. Colonel Jackson commanded the Georgia Legion, consisting of horse and infantry, and on the same day he received from the British commander the keys, and took possession of the city.

The first session of the Legislature of the State was held in Savannah in January, 1784, in the brick house now standing in South Broad-street, between Drayton and Abercorn-streets. This building was afterwards occupied as a public house, and long known as "Eppinger's Ball Room." It is the oldest brick house in Savannah. Dr. Lyman Hall was then governor.

In December, 1789, a law was passed by the Legislature making Savannah a city.

The first mayor (elected in 1790) was John Houstoun. The oldest mayor now living is William B. Bulloch, elected in 1809. The oldest alderman is Colonel James Hunter, elected in 1806.

In November, 1796, the first destructive fire occurred in Savannah. It broke out in a bake-house in market square, and destroyed 229 houses, besides out-houses, &c. Estimated loss of property one million of dollars.

In May, 1814, arrived in the waters of Savannah the United States sloop of war Peacock, Lewis Warrington commander, (now Commodore Warrington, the fourth on the present list of post captains,) bringing in as a prize H. B. M. brig of war Epervier, Captain Wales, of 18 guns. The Epervier had on board \$110,000 in specie, which was condemned and distributed according to law. She was built in 1812, and was one of the finest vessels of her class in the British navy.

In April, 1819, arrived the steamship Savannah from New York. This steamer was projected and owned in Savannah, and was the first steamship built in the United States, and the first that ever crossed the Atlantic. She left Savannah in May for Liverpool, and afterwards proceeded to St. Petersburg.

In January, 1820, occurred the largest fire which ever ravaged the city. It commenced on the east side of Old Franklin Ward. Four hundred and sixty-three buildings were destroyed, besides out-buildings. Loss upwards of \$4,000,000.

POPULATION OF SAVANNAH.

The number of persons enumerated in the census of April, 1848, is 13,573.

The increase of the population of Savannah, since 1840, has been 2,359, equal to 21 per cent, in about seven and a half years. By comparing this with previous enumerations, we have the following facts:—

Savannah, in 1810, which is the earliest period of which any satisfactory census of the city can be found, contained a population of

1810.	1820.	1830.	1840.	1848.
5,195	7,523	7,773	11,214	13,573

showing an increase, since 1810, of 8,378, equal to 161 per cent, in thirty-eight years.

A comparison of the above enumerations of Savannah with those of several other cities of the United States, in the same periods, present the following interesting results:—

New Orleans, a city which, since its annexation to the Union, has probably been without a parallel for rapid increase, had, in 1810, a population of 7,242; in 1840, 102,193, showing an increase of 492 per cent in thirty years.

New York had, in 1810, a population of 96,373; in 1840, 312,710, showing an increase of 224 per cent in thirty years.

Baltimore had, in 1810, a population of 35,583; in 1840, 102,413, showing an increase of 187 per cent in thirty years.

Boston had, in 1810, a population of 33,787; in 1840, 85,000, showing an increase of 151 per cent in thirty years.

Philadelphia had, in 1810, a population of 96,287; in 1840, 228,691, showing an increase of 137 per cent in thirty years.

Savannah had, in 1810, a population of 5,195; in 1840, 11,214, showing an increase of 116 per cent in thirty years.

Charleston had, in 1810, a population of 24,711; in 1840, (exclusive of the "Neck," which is not within the corporate limits of the city,) 29,261; showing an increase of 18 per cent in thirty years.

Charleston, with the district of St. Philip's Parish, or what is called the Neck," annexed as a part of the city, would give 41,137 as a total of the population of 1840; comparing this with the population of 1810, which is probably that of the city proper only, there will appear an increase of 6 per cent in thirty years. This calculation is made under the peculiar circumstances of the locality of the population around Charleston; but it does not appear to be one correct in principle, as several other cities mentioned are suburbs, some of them quite populous, not within their jurisdiction, and not enumerated in their returns.

The relative increase in the city since 1840, of the classes of whites and colored, is as 23 per cent whites, to 18 per cent colored. The population in 1840, stood as 52 in 100 whites, to 48 in 100 colored. The population in 1848, stands as 54 in 100 whites, to 46 in 100 colored. Population is frequently divided, at the age of 20, equally into those older and younger than that age. The census of 1848 stands by the division at 21 years, as 47 in 100 under 21, to 53 in 100 over 21. In Boston, in 1830, it stood 43 in 100 under 20, to 57 in 100 over 20. In 1845, 41 in 100, to 59 in 100.

The city of Savannah is divided into twenty-six wards, and the population of each ward is given and classed in one of Mr. Bancroft's tables. The classification of the whole city as to sex and color, in 1848, was as follows:—

White males.....	3,729	Colored female slaves.....	1,270
“ females.....	3,521	“ males, free.....	241
Colored male slaves.....	2,816	“ females, free.....	396

Mr. Bancroft thus classifies the occupation of the male adults of Savannah, in 1848:—

OCCUPATION OF MALE ADULTS.

Merchants, factors & wholesale dealers.....	263	Manufacturers of tin ware.....	6
Planters.....	50	Connected with hotels.....	6
Shop-keepers and retail grocers.....	136	Auctioneers.....	4
Master builders.....	14	Editors.....	3
Marble and stone manufacturer.....	1	Dentists.....	4
Mechanics.....	380	Artists.....	2
Ministers of the gospel.....	15	Lumber measurers.....	1
Judges of courts.....	4	Brick makers.....	1
Physicians.....	36	Dyers.....	1
Attorneys at Law.....	31	Clothing stores.....	1
U. S. Army and Navy officers.....	6	Segar makers.....	1
U. S. civil officers.....	24	Public stables.....	1
Civil engineer.....	1	Barbers.....	1
Engineers.....	30	Soap and candle manufacturer.....	1
Clerks.....	253	Engraver.....	1
Druggists.....	15	Bar rooms.....	1
Pilots.....	23	Watchmen at banks.....	1
Bank officers.....	24	Saddle and harness makers.....	1
Teachers.....	15	Millers.....	1
Teachers of music.....	5	Connected with steam mills & cotton presses.....	1
Captains of steamers and vessels.....	28	Lumber and wood yards.....	1
Captain revenue service.....	1	Steamboat yards.....	1
Magistrates.....	8	Lottery offices.....	1
County officers.....	7	United States soldiers.....	1
Butchers.....	24	Constables.....	1
Bakers.....	22	Keepers of sailor boarding houses.....	1
Boot and shoemakers.....	27	Keeper of Sailors' Home.....	1
Printers.....	14	City officers.....	1
Connected with railroad.....	22	Ice houses.....	1
Booksellers.....	8	Keeper of hospital.....	1
Watchmakers and jewellers.....	8	Jailor and deputy.....	1
Painters.....	18	Connected with city watch.....	70
Seamen.....	58	Laborers.....	164

OF THE COLORED POPULATION.

Mechanics.....	34 free.	73 slaves.	Total 107
Butchers.....	2 “	5 “	“ 7
Barbers.....	5 “	1 “	“ 6
Engineers and pilots.....	2 “	4 “	“ 6
Preachers.....	“	“	“ 3

Savannah, by the census of 1840, contained of those engaged in agriculture, 46 males; commerce, 604; manufactures and trades, 707; navigation of the ocean, 201; navigation of rivers, &c., 40; learned professions and engineers, 131. Total, 1,720.

STATISTICS OF DWELLINGS AND STORES.

The number of dwelling houses in Savannah is put down at 1,925, of which 1,702 are built of wood, and 223 of brick. Number of stores not used as dwellings, of wood 17, and of brick 265. The number of dwellings of wood built within ten years, amounts to 244, and of brick, in the same period, to 88. The stores of brick built within ten years, is 74. The num-

ber of houses owned by occupants, is 382, and the number not owned by occupants, or rented, 1,543.

COMMERCE OF SAVANNAH.

Cotton, one of the largest items in the present exports of Savannah, is an article which was almost unknown in commerce until the close of the last century. Of the two kinds cultivated in the United States, the black seed or long staple cotton was first cultivated in Georgia about the year 1786; the green seed or short staple cotton some years after, although it had been raised in North Carolina and Virginia in a limited way prior to the Revolution. The native place of the seed of the long staple cotton is believed to be Persia. Its first cultivators in this State were Josiah Tatnall, Nicholas Turnbull, James Spalding and Richard Leake. The first bag exported from Georgia was grown by Alexander Bisset, of St. Simon's Island, and shipped from Savannah by Thomas Miller in 1788. Mr. Miller is still living in Camden county, in the enjoyment of a green old age. He was one of the first who engaged in the business of buying cotton in the Savannah market, and for a long time was the only purchaser. It came to him in parcels of from 20 lbs. to 100 lbs., and with his own hands he assorted and packed it for market. His exclusive and ardent zeal in bringing forward the article, gave him very early the name of "Cotton Miller," which he still holds in much honor. In 1792 the growth of cotton was so inconsiderable, or as a commercial article deemed of so little value, that Mr. Jay in his treaty with England, negotiated that year, consented to the stipulation that no cotton should be imported from America. The Senate of the United States refused to ratify the article. In 1792, the entire crop of the United States was 450 bags; in 1847, 2,351,335 bags! In 1784, an American vessel that carried eight bags to Liverpool was seized, on the ground, *that so much cotton could not be the produce of the United States*. In 1794, the invention of the saw gin, by Eli Whitney, of Connecticut, gave a powerful impetus to the culture of cotton, and from that period its production has been rapidly onward.

Rice. This article, also, an important one in the exports of Savannah, is chiefly produced in its immediate vicinity. The cultivation of rice was commenced on the Savannah river previous to the Revolution. Governor Wright, the last of the Royal Governors, was a rice planter, and was prominent in encouraging its culture, and bringing into use and value the "Tide swamps." He cultivated the lands immediately adjoining the city on the east. There are at the present time on the Savannah river fifty plantations raising rice, (about one-half of which are on the South Carolina shore,) whose aggregate yearly product is estimated at 750,000 bushels. The most distant one of these plantations is about 12 miles from the city. On the Ogeechee river there are nineteen plantations, (eleven on the Chatham county side and eight on the Bryan county side,) whose aggregate yearly product is estimated at 200,000 bushels. The most distant one from Savannah is 23 miles. On the Altamaha and St.illa rivers there are about thirty-five plantations raising rice, some of them very extensive. Their crops are divided in shipment between Charleston and Savannah.

LUMBER. Lumber has been, for the past ten or fifteen years, a gradually increasing item in the exports of Savannah. It now assumes a very important place among the products of the State. It enters very largely into the construction of even our first class vessels. The real yellow pine, which abounds in Georgia, and of which there can be no failure for centuries to

come, is destined to supply the place of the gradually disappearing oak of the northern regions. It has a twofold claim upon the attention of the ship-builder and owner, since it not only can be furnished at a considerably lower rate, when compared with oak, but is actually more durable, and better holds and protects fastenings. The yellow pine of Georgia is much sought after for building purposes in our northern cities, and but few public buildings go up that are not composed, more or less, of this valuable material. Its beauty, when laid down in floors and stairs, is too well known to require mention here. In the year 1826, when the Savannah steam saw-mill was erected, there was not another within or near the city, or even in the State.

The following table presents the exports from Savannah of cotton, rice, and lumber, for ten years past; also the exports of cotton and rice in the years 1825 and 1826. A comparison of the aggregate of *pounds* of cotton exported in the several years, will show the great increase of weight of *bales* which has taken place, particularly since 1845. It is estimated that the increase is about twenty per cent:—

COTTON.						
Years.	Foreign ports.		Coastwise.		Total.	Total.
	Bags.	Lbs.	Bags.	Lbs.	Bags.	Lbs.
1825.....	64,908	23,366,160	72,789	26,204,040	137,695	49,470,200
1826.....	108,486	39,054,960	82,092	29,553,120	190,578	68,608,080
1839.....					199,176	71,703,360
1840.....					284,249	102,329,640
1841.....					147,280	53,020,800
1842.....	142,386	52,258,960	79,868	28,752,480	222,254	81,011,440
1843.....	193,099	69,515,640	87,727	31,581,720	280,826	101,097,360
1844.....	180,964	48,456,680	113,611	42,036,070	244,575	90,492,750
1845.....	182,073	69,187,740	122,471	46,538,980	304,544	115,726,720
1846.....	77,852	31,140,800	108,454	43,381,600	186,306	74,522,400
1847.....	119,321	50,114,820	114,830	48,228,600	234,151	98,343,420
1848.....	127,760	54,936,800	116,473	49,653,390	243,233	104,590,190

	RICE.			LUMBER.		
	Foreign ports.		Total.	Coastwise.		Total.
	Tons.	Tons.		Feet.	Feet.	
1825...	2,154	5,081	7,231	.....	.....	.....
1826...	4,978	6,477	11,455	.....	.....	.....
1839...	.....	.....	21,332	.....	.....	.....
1840...	.....	.....	24,392	.....	.....	.....
1841...	.....	.....	23,587	.....	.....	14,395,200
1842...	5,933	16,131	22,064	5,919,400	2,471,000	8,390,400
1843...	10,675	15,606	26,281	5,532,750	1,986,000	7,518,750
1844...	10,307	18,236	28,543	3,034,064	2,899,187	5,933,251
1845...	11,712	17,505	29,217	3,333,646	4,936,936	8,270,582
1846...	5,025	27,122	32,147	13,365,968	5,219,676	18,585,644
1847...	10,218	21,521	31,739	4,886,425	5,197,024	10,083,449
1848...	7,987	22,149	30,136	7,626,615	8,822,943	16,449,558

RECEIPTS OF COTTON AT SAVANNAH PER YEAR FOR ELEVEN YEARS.

From September 1, 1837, to September 1, 1838.....	bales	206,048
" 1, 1838, " 1, 1839.....	.....	196,613
" 1, 1839, " 1, 1840.....	.....	295,156
" 1, 1840, " 1, 1841.....	.....	146,373
" 1, 1841, " 1, 1842.....	.....	228,295
" 1, 1842, " 1, 1843.....	.....	299,175
" 1, 1843, " 1, 1844.....	.....	243,429
" 1, 1844, " 1, 1845.....	.....	306,742
" 1, 1845, " 1, 1846.....	.....	189,075
" 1, 1846, " 1, 1847.....	.....	236,079
" 1, 1847, " 1, 1848.....	.....	245,233

EXPORTS FOR THE YEAR ENDING APRIL 1, 1848.

Corn to foreign ports.....bush.	60,087	\$55,392 value.
Turpentine ".....bbls.	412	901 "
Cotton Osnaburga.....yards	30,000	1,666 "

IMPORTS OF SALT, MOLASSES, AND IRON FROM FOREIGN PORTS INTO SAVANNAH.

Year ending October 1, 1848, of salt.....bush.	334,219
" " 1, 1847, ".....bush.	360,730
" " 1, 1846, ".....bush.	234,799
" " 1, 1848, of molasses.....galls.	364,132
" " 1, 1847, ".....galls.	369,235
" " 1, 1848, of iron.....value	\$62,569
" " 1, 1847, ".....value	2,708

VESSELS ARRIVED AT THE PORT OF SAVANNAH, AND ENTERED AT THE CUSTOM-HOUSE, IN THE YEAR ENDING APRIL 1, 1848.

	No.	Tons.
American vessels from foreign ports.....	41	6,925
Employing 320 men.		
American vessels from coastwise ports.....	397	99,409
Employing 3,269 men and 71 boys.		
Foreign vessels from foreign ports.....	51	28,766
Employing 857 men and 170 boys.		
Total.....	489	135,100

VESSELS CLEARED FROM THE PORT OF SAVANNAH, AS PER CUSTOM-HOUSE CLEARANCES, IN THE YEAR ENDING APRIL 1, 1848.

	No.	Tons.
American vessels to foreign ports.....	61	14,339
" " coastwise.....	139	28,012
Foreign vessels to foreign ports.....	55	30,569
Total.....	255	72,920

Many vessels sailing under coasting licenses, clear at the custom-house only when carrying a certain amount of foreign goods; hence the number of arrivals greatly exceed the clearances.

VESSELS IN THE PORT OF SAVANNAH.

JANUARY 1, 1847.			JANUARY 1, 1848.		
13 ships.....tons	7,327		13 ships.....tons	7,184	
9 barks.....	3,872		11 barks.....	5,035	
10 brigs.....	2,507		8 brigs.....	1,719	
32 vessels.....	13,706		32 vessels.....	13,938	
APRIL 1, 1847.			APRIL 1, 1848.		
6 ships.....	4,859		16 ships.....	9,653	
5 barks.....	3,076		6 barks.....	2,953	
4 brigs.....	1,211		13 brigs.....	2,694	
15 vessels.....	8,646		35 vessels.....	15,300	
NOVEMBER 15, 1848.					
17 ships.....tons			9,543		
10 barks.....			4,107		
11 brigs.....			2,510		
38 vessels.....			16,160		

VESSEL PACKET LINES. There are six regular packet lines from the port of Savannah, namely:—The "Old Established Line," between Savannah and New York, and leaving Savannah and New York on Thursday of every

week; the "Brig Line," between New York and Savannah, leaving either place on Monday of every week; and the "New Line," leaving Savannah on Tuesday of every week, and New York on Saturday of every week. The "Established Line," between Savannah and Philadelphia; the "Commercial Line," between Savannah and Augusta; and a line between Savannah and Boston.

NEW CUSTOM-HOUSE. This building is going forward in its erection as rapidly as a due regard to the stability and permanence of the structure will admit. The basement is nearly finished. It is in length 110 feet, depth 52 feet, and in height, from the pavement to the ridge of the roof, 52 feet. The basement story will be devoted to the use of the post office and the appraiser's department. The first, or principal floor, for custom-house purposes. The third, or upper story, for United States court rooms.

STEAMBOAT LINES. The daily United States Mail Steam Packet line, plies daily between Savannah and Charleston. There is also a semi-weekly Mail Steam Packet line between Savannah, Ga., and Palatka, Fla., via Darien, Brunswick, and St. Mary's, Ga., Jacksonville, Black Creek, and Pocolata, Fla.; another semi-weekly Steam Packet line runs between Savannah and Augusta, and the boats of the Steamboat Packet Company of Georgia ply between Savannah and Augusta. The Iron Steamboat Company of Georgia has also three steamers running between Savannah and Augusta; fifteen steamers in the regular lines. There are also six steamers employed in the port of Savannah, not belonging to any regular line.

We here subjoin a list of vessels and steamers registered and owned wholly or in part in Savannah, with their tonnage:—

VESSELS AND STEAMERS REGISTERED AND OWNED WHOLLY OR IN PART IN SAVANNAH, WITH THEIR TONNAGE.

Ship John Cumming.....	tons	721	Steamer Cherokee.....	tons	189
" Edwin.....		339	" Chatham.....		198
" Georgia.....		641	" T. S. Metcalf.....		180
Bark Bacchus.....		195	" J. Randolph.....		177
" Henry Dubignon.....		572	" Lamar.....		196
Brig Larch.....		142	" Amory Sibly.....		212
" Carribbee.....		219	" Sam Jones.....		165
" Selma.....		206	" H. L. Cook.....		124
" Alert.....		142	" Ivanhoe.....		140
" Josephus.....		142	" Wm. Gaston.....		167
" John Enders.....		195	" Ocamulgee.....		284
18 schooners.....		1,001	" St. Matthews.....		174
9 sloops.....		411	" W. Seabrook.....		284
Steamer Oglethorpe.....		193	" Metamora.....		282
" J. Stone.....		225	" General Clinch.....		256
" Eliza.....		47	" Tennessee.....		185
" Robert Collins.....		153			
Total.....					8,725

STEAMSHIP LINE, BETWEEN SAVANNAH AND NEW YORK.

In this line there are two new superior ocean steamers, the Cherokee and Tennessee, each upwards of 1,200 tons burthen, unsurpassed in strength, beauty of model, and solidity of machinery, and with all the latest improvements in them which experience has suggested.

Up to the date of preparing this article, the Cherokee has performed eight passages between New York and Savannah, one of which (her first from Savannah to New York) was made during the prevalence of the terrific gale of

hurricane of 13th and 14th October; one as violent as ever experienced on the Atlantic coast, and which crippled a large number of sailing vessels, yet it of this stern trial she came almost unscathed, proving herself one of the staunchest vessels that ever rode the waves. Her other passages were performed in from 58 to 72 hours each from wharf to wharf; though in the worst weather of the milder season, she may do it in even less than the shortest time named. This enterprise has been got up and carried through by the joint means of New York and Savannah capitalists, and promises to be eminently successful. It affords most desirable travelling facilities to the citizens of Georgia and the adjoining States.

SAVANNAH AND OGEECHEE CANAL COMPANY.

This company was formerly the Savannah, Ogeechee, and Altamaha Canal company. Capital, \$199,225. It expended \$246,693 on the work, and offered it to go down. In January, 1846, the present company purchased the concern, and have since that time put the canal in thorough repair, built new lock near the city, in Stiles' field, and one near the Ogeechee river, and constructed a wasteway at the Little Ogeechee river, to vent off the surplus water. Amount of expenditures of the new company on the work, about 16,000.

The locks are all of brick, 110 feet long, 18 feet wide, except the lock at the Savannah river, which is 30 feet wide, and will admit a vessel of 10 feet water. The canal, from the lock to the railroad bridge, is 160 feet wide, and with a little deepening, a vessel drawing 10 feet water can pass up to the railroad bridge. It is estimated that at least 20,000 to 25,000 cords of wood and 10,000,000 feet of lumber will annually pass down the canal, besides ice, bricks, and various other articles. The present company have reduced the tolls, and they design to make it the interest of the public to use the canal. The charter is a very liberal one, being perpetual, and free from taxes and the expense of keeping up bridges over the canal.

BANKING INSTITUTIONS.

There are five institutions for banking purposes in Savannah, namely:—The *Bank of the State of Georgia*, with branches located at Augusta, Eatonton, Athens, Washington, and Greensboro', and agencies at Macon and Griffin. This bank has a capital of \$1,500,000, \$750,000 of which is appropriated to Savannah. The principal officers are A. Porter, President, and R. Tefft, Cashier. The *Planters' Bank* has a capital paid in of \$535,400. George W. Anderson is the President, and H. W. Mercer the Cashier. The *Marine and Fire Insurance Bank*, with a capital of \$400,000, is privileged to increase it to \$800,000. E. Padelford, President, and J. Olmstead, Cashier. The *Central Railroad and Banking Company* has a capital of \$2,549,165, of which has been paid in. The amount appropriated to banking purposes is \$205,000. R. R. Cuyler is the President, and George J. Bulloch Cashier of this company.* The total banking capital of the institutions above named, appropriated to the trade and commerce of Savannah, amounts to \$1,890,400.

* For the business, &c., of the railroad belonging to this company, the reader is referred to the department, in the present number of the *Merchants' Magazine*, devoted to "Railroad, Canal, and Steamboat Statistics."

Mr. Bancroft furnishes the following abstract of the dividends declared by the banks in Savannah, for the ten years ending May, 1848:—

The Bank of the State of Georgia has declared during that period, fifteen semi-annual dividends; intermitted two in 1842, one in 1843, and two in 1844—five total. Average per cent per annum for the seven and a half years in which dividends were declared, $6\frac{4}{5}$ per cent per annum. For the whole ten years, average $4\frac{3}{5}$ per annum.*

Planters' Bank has declared, without intermission, twenty semi-annual dividends of 4 per cent each, except in the years 1842 and 1843, when they were 3 per cent each, and in 1847, when $4\frac{1}{2}$ per cent each was declared. Average per year for the ten years, $7\frac{7}{10}$ per cent per annum.

Marine and Fire Insurance Bank has declared nineteen semi-annual dividends, intermitting one in December, 1842. They were all of 4 per cent, except the one declared in June, 1843, which was 3 per cent. Average per year for the ten years, $7\frac{7}{10}$ per cent per annum.

Central Railroad and Banking Company declared from June, 1838, to June, 1839, inclusive, dividends on capital employed in banking, an average of 9 per cent per annum.

From December, 1839, to December, 1840, both inclusive, three dividends on bank and road stock, average of $4\frac{7}{8}$ per cent per annum.

In the years 1841, 1842, 1843, 1844, 1845 and 1846, no dividends.

From June, 1847, to June, 1848, both inclusive, three dividends on bank and road stock, average of $4\frac{1}{2}$ per cent per annum for the eighteen months.

Amount of dividends declared for the year ending May 31st, 1848, \$129,025.

The following is a statement of the condition of the *Savannah Institution for Savings*, as derived from the annual reports, and exhibited by Mr. Bancroft in a condensed form:—

Number of deposit books issued in 4 years.....	409
“ depositors, 1st April, 1848.....	300
The deposits for the 1st year, 1844, were.....	\$8,481 00
“ “ 2d “ 1845, “	16,250 00
“ “ 3d “ 1846, “	15,404 00
“ “ 4th “ 1847, “	25,812 00
Total amount deposited.....	\$65,947 00
1st year a dividend of 8 per cent was declared.....	\$283 50
2d “ “ 8 “ “	813 14
3d “ “ 8 “ “	1,643 94
4th “ “ 7 “ “	2,316 16
And the surplus fund on hand on 3d April, was.....	1,329 96
Total sum made from deposits.....	\$6,385 98

The following table exhibits the different amounts drawing interest at the close of each of the four years since the institution has gone into operation:—

	AMOUNTS DRAWING INTEREST.			
	12 months.	9 months.	6 months.	3 months.
1st year.....	\$1,984	\$1,392	\$691	\$800
2d “	5,884	2,260	3,672	3,027
3d “	13,974	4,607	4,857	4,093
4th “	25,229	6,342	4,477	3,682

* The dividends of this bank, for twenty-one years preceding 1838, averaged 7 per cent per annum. The losses from 1838 to 1842 were heavy; hence the omission of dividends in 1842, 1843, and 1844.

AMOUNTS DRAWING NO INTEREST.

1st year, \$2,388 2d, \$3,517 3d, \$4,985 4th, \$6,646

The aggregate number of notes and bonds purchased, 507.

INSURANCE OFFICES. Fourteen foreign companies have agencies in Savannah, namely:—The Augusta Insurance and Banking Company, three Connecticut companies, seven New York companies, two New Jersey, and the Phoenix, London.

FOREIGN CONSULS. England, Denmark, France, Spain, Belgium, Portugal, Brazil, Sweden and Norway, Russia, Bremen and the Two Sicilies, are represented by consuls in Savannah.

STATEMENT OF THE DEBT OF THE CITY OF SAVANNAH IN THE YEARS 1845 AND 1848.

	1848.	1845.
City loan for internal improvements—amount of bonds outstanding.....	\$459,000 00	\$476,000 00
Bonds to the Monroe Railroad and Banking Company—amount of bonds outstanding.....	22,500 00	49,000 00
City scrip—amount of scrip outstanding.....	1,543 00	8,236 00
Corporation notes—amount of notes outstanding.....	1,979 50	1,990 15
Mayor's notes running to maturity at the different banks.....	.....	16,600 00
	\$485,022 50	\$551,826 15
Reduction of the public debt in the last three years.....	66,803 65	.....
	\$551,826 15	\$551,826 15

VALUE OF REAL ESTATE IN SAVANNAH, AS TAXED BY THE CITY AUTHORITIES SINCE 1843.

1843, value....	\$2,853,900	1845, value....	\$3,279,988	1847, value....	\$3,462,073
1844, " ...	3,245,827	1846, " ...	3,306,734	1848, " ...	3,600,000

Colored mechanics licensed by the City Council, being other than those owned by master builders, 1848, 86; 1840, 29.

Public drays registered by the City Council, 1848, 81; 1841, 31.

Public wagons registered by the City Council, 1848, 91; 1841, 74.

The city owns 5,000 shares of the stock of the Central Railroad and Banking Company, \$500,000, which paid dividends for the year ending Oct. 31, 1848, of 4½ per cent.

GOVERNMENT OF SAVANNAH.

The government of the city consists of a mayor and twelve aldermen, who together are denominated the City Council. They are chosen annually, on the first Monday in December, from the people at large. The police consists, besides the above, of one marshal, five constables, and the city watch, composed of sixty-four members, with a captain and other officers. A Board of Health, composed of two persons from each ward and district, is appointed by the mayor, in May of every year. All subordinate officers are chosen by the City Council.

EDUCATION. Savannah, in all appertaining to the education of youth, is not behind her sister cities. It is true, public education has not received that attention it has in many other places; still, she has always had a respectable number of private seminaries, and has sent to institutions in other parts of the State and country, hundreds of her youth of both sexes. Much, however, can yet be done for public education.

ART. V.—THE LAW OF DEBTOR AND CREDITOR IN MARYLAND.

NUMBER I.

THE SYSTEM OF LAWS IN FORCE IN MARYLAND—ITS ORIGIN, AND THE PUBLICATIONS IN WHICH IT IS TO BE FOUND—EQUITY JURISPRUDENCE—COURTS IN MARYLAND—THEIR CONSTITUTION, JURISDICTION, AND TERMS—CONTRACTS—HOW MADE—STAMP ACT—TAX LAWS—BOOK ACCOUNTS—CHOSEN IN ACTION—PERSONS CAPABLE OF CARRYING ON TRADE—PARTNERSHIPS—CORPORATIONS—AGENTS AND FACTORS—SHIPPING—PART OWNERS, ETC.

THE already vast, increasing, and intimate commercial connection between the different States of our confederacy ; the extended interests of the mercantile community, whose rights and obligations depend upon the various and often discordant legislation in each of them ; and the peculiar liabilities and privileges consequent thereon, render some knowledge of the general principles of these different systems almost indispensable to a proper management of business. Emphatically interesting to the importers and dealers in our large commercial cities—the creditors, whose rights and duties are constantly subject to such various construction and control. In the *Merchants' Magazine* has already appeared a series of articles upon this subject, giving an account of the different laws in many of the United States. None, however, has yet been published in regard to Maryland—one that ranks high in a commercial point of view, and as such, is intimately connected with all the others. The following is an attempt to supply that deficiency.

There is a late work upon the “Law of Debtor and Creditor in the United States and the Canadas,” by J. P. Holcombe, Esq., which proposes to afford information in regard to the laws in the different States upon this subject. The portion, however, devoted to Maryland is very short, and is defective and imperfect in some very important particulars. This is not said with any intention of disparaging the value of Mr. Holcombe's work as a book of general reference in regard to the laws of other States, for, in this respect, it may be fully entitled to any reputation it has acquired ; but it must be apparent to every one that it is almost impossible for any other than a resident member of the profession to give an exact or complete account of any portion of the laws of any of the States in this Union. In some of them the passion for reform is constantly producing change ; in others, the system in force has never been reduced to a shape readily available for reference.

This last is especially true of our own State, where the laws have never been revised or codified, but are to be looked for, and their alterations traced, through upwards of forty volumes. Gentlemen out of the State are in the habit of referring to “Dorsey's Laws of Maryland”—a work which, as is well known to every Maryland lawyer, affords as much incorrect information as any book that can be named.

We propose, then, to offer a concise account (and at the same time as comprehensive as our limits will allow) of the Law of Debtor and Creditor in Maryland, discarding, as far as possible, the use of technical terms, and confining ourselves to those points most interesting to merchants and foreign creditors. Among these are agency, bills and notes, rights of action, defences thereto, judgment, (how soon recoverable and available,) the liens to which it gives rise, and the modes of proceeding against the estates of deceased or insolvent persons.

The great principles governing the law on all these points are the same in

almost all the States; and we propose chiefly to state under these heads those points only in which the law, as declared in Maryland, may be supposed to differ from that which obtains elsewhere.

Let us, however, take a view

I. OF THE SYSTEM OF LAWS IN FORCE IN MARYLAND—ITS ORIGIN—AND THE PUBLICATIONS IN WHICH IT IS TO BE FOUND.

The system prevalent in Maryland consists of the Common and Statutory Laws. These embrace, 1. The English Common Law, (as declared by judicial decisions in England prior to our own Revolution, and in this State since,) unaltered by later enactments, and not inconsistent with the nature of our political institutions. 2. Those English statutes existing at the time of the first settlement of this State, which have by experience been found applicable to the local or other circumstances of the early inhabitants; and such of the later English statutes as have been introduced, used, and practised by the courts of law or equity. 3. All acts of the Provincial Assembly in force on the 1st June, 1774, except those which have afterwards expired, been altered by acts of convention, or since repealed. 4. The Constitution of Maryland and the acts of Assembly passed by the State Legislature. 5. Equity Jurisprudence also prevails in Maryland, based upon, and almost identical in its principles and practice with the English Chancery system.

From this it will be seen that we derive our laws from that source to which we owe our language, and in a great measure the free spirit of our institutions. It has been judicially declared in this State, that the first settlers of the province brought with them, *from England*, the Common Law, and those statutes suited to the condition of an infant colony.

The laws of Maryland are to be found, 1. In Kilty's Report of the English Statutes in force, used and practised in this State, and proper to be incorporated into its Statute Law. This compilation was made by order of the Legislature, and was afterwards declared by it and by the Court of Appeals to be an authoritative guide in determining what English Statutes were applicable and of force in the State.

2. In the compilations (published by authority) of Maxcy, Kilty, Harris, and others; and, thirdly, in the volumes of laws published annually by order of the Legislature, since 1811. By a late amendment of the Constitution, the next Legislature will meet in December, 1849, and afterwards *biennially*. These volumes, therefore, will hereafter be published during every alternate year.

In 1840, Judge Clement Dorsey, with the pecuniary aid of the Legislature, published a work in three volumes, professing to contain all the statutes of Maryland existing and in force at that time. This compilation, however, is, in many particulars, so inaccurate, and in others so defective, that it is not in all cases to be relied on. The safest, and therefore the best and only way of knowing the state of our law upon any subject, is to refer to the volumes above mentioned, and trace whether or no it has since been changed.

During the last session of our Legislature a joint resolution was passed, subscribing, in the name of the State, to a compilation of the "Public Statutory Law, accompanied by marginal references to all decisions in the United States or State courts, affecting or construing the same," to be made by Henry Stout, Esq., of Baltimore.

This publication, it is hoped, will supply the deficiency hitherto so seriously felt in this respect; containing, as it no doubt will, an accurate list and ac-

count of the laws of this State, without confusion in their arrangement, and without the occasional omission, either of an important statute, or of the negative particle.

The reported decisions of the highest tribunal of law and equity in Maryland, are contained in twenty-eight volumes. Of those in the first twenty-five, an admirable digest has been made and published by three gentlemen of the Baltimore Bar. There are also three volumes of decisions of our High Court of Chancery, reported by the late Chancellor Bland.

II. OF THE COURTS IN MARYLAND—THEIR CONSTITUTION, JURISDICTION, AND TERMS.

Maryland, for the more convenient administration of justice, is divided into six judicial districts, embracing the twenty counties of the State. Each of these last has a county court, which is a (less principal) superior court of general jurisdiction, having exclusive authority to hear and determine all suits and actions at law whatsoever, where the debt or damages claimed exceed one hundred dollars. In the *counties*, actions for debt or damages under that sum, and exceeding fifty dollars, are exclusively cognizable in the District (Magistrates') Courts. Sums not exceeding fifty dollars are recoverable only before justices of the peace, who, in Baltimore city, have a concurrent jurisdiction with the county court in almost all cases where the sum claimed does not exceed one hundred dollars.

To these general powers of the county courts are added jurisdiction in cases of attachment, the power to issue writs of habeas corpus and mandamus, and an equity jurisdiction within the county, concurrently with the High Court of Chancery, whose powers extend over the State.

Of the judicial districts, one embraces two counties; two, three; and three contain four. In each district there are a chief judge and two associates, (appointed by the Governor and Senate, and holding office during good behavior,) who are judges of all the county courts therein. Any one of these judges may, within his district, hold a court, of which there are two terms annually, in each county, at periods fixed by law.

In addition to the two regular terms of Baltimore County Court, three other (called city terms, on the second Monday of January, 1st day of May, and second Monday of September) are held by the judges of the Sixth Judicial District, for the despatch of the business of the city of Baltimore. At these terms the court is attended, and civil cases alone are tried, by a city jury; and they can try no matter of fact in any cause, at the commencement of which the defendant resided out of Baltimore city.

The County Courts also hold intermediate, between the common law terms for the transaction of chancery business; but in Baltimore city one of the judges sits in equity on the first day of every month, except July, August, November, March, and April.

The Orphans' Courts in each county have charge of the management of estates, and all matters relating to the affairs of deceased persons.

As before stated, the justices of the peace have jurisdiction of all cases whatever, where the debt or damages claimed shall not exceed fifty dollars, *except* in actions of slander, assault and battery, and in cases where the title to lands shall come into question. And notwithstanding this latter exception, they have still a jurisdiction where, in an action for injury done to real property, the plaintiff does not claim more than fifty dollars. In the city of Baltimore their jurisdiction is extended to all cases where the amount

claimed is not over one hundred dollars. From their decisions a final appeal lies to the county courts.

The High Court of Chancery is held at Annapolis by the Chancellor, has equity jurisdiction over the whole State, and holds four regular terms, in March, July, September, and December.

The decisions of all these courts are reviewed upon writs of error and appeals, by the highest tribunal in the State—the Court of Appeals—which is composed of the chief judges of the six districts, and holds four annual sessions: for the eastern shore, at Easton, in June and November; and at Annapolis, in June and December, for the western shore.

III. OF CONTRACTS REQUIRED TO BE IN WRITING—STAMP ACT, TAX LAWS, AND MANNER OF PROVING BOOK ACCOUNTS, ETC.

The English Statute of Frauds, though never in terms published or enacted here, is of force, and should receive a liberal construction in this State. By it, all contracts of the representative of a deceased, to bind his own estate; all promises to answer for the debt, default, &c., of another; agreements made in consideration of marriage; contracts for the sale of lands or interest therein, &c.; or for sale of goods of the value of £10 sterling and upwards, (without a partial delivery or earnest;) and all agreements not to be performed within a year, are invalid, unless reduced to writing and signed (in any part) by the party to be charged, or his lawful agent.

For the purpose of raising revenue, a stamp act has been passed, which requires that a duty (according to the rates therein fixed) be paid, and stamped, upon every bond, obligation with collateral condition, mortgage, or release, single bill, *promissory note and bill of exchange*, to secure the payment of more than \$100, entered into, made, or issued in this State, to render them available in the courts thereof as evidences of debt.

On every deed of lands or interest therein, and bill of sale, when the value conveyed exceeds \$200, a stamp of one dollar is required. The State and county taxes on property within those limits, and the taxes imposed by the city of Baltimore on property within the corporation bounds, are charges upon each specific piece. If not paid within a certain time after presentment of the tax bill, and the collector be unable to find personal property sufficient to satisfy the same, he is required, in the counties, to advertise and sell the land so charged. In the city of Baltimore, the goods of a tenant in possession are liable, as goods found on the property, to distress for non-payment of the taxes; and a tenant paying these may set them off against the landlord in an action for rent. Unimproved real estate may be sold for taxes due thereon after the expiration of eight months; and the purchaser at such sale takes title defeasible at any time within two years after such sale, upon payment to the city register, by the owner of such lot, of the amount of taxes due, and charges and expenses; together with a further sum of 18 per cent on such amount, and the value of improvements (if any) made by such purchaser.

Small debts (under \$26 66) are sufficiently proved by the oath of the claimant, before a justice of the peace, within twelve months after the date of the first item charged; unless the defendant, by *other* evidence than *his* oath, can show the falsity of any part thereof.

The execution of any *bond, bill, or note* in any of the United States or any foreign country, (not there required to be of record,) may be proved by the oath or affirmation of the subscribing witnesses, taken before any judge or

justice of said State or country authorized to administer it; accompanied by a certificate of such facts, (of oath and authority,) under seal from the governor or notary public of such State or country. In case of the death of such subscribing witnesses, proof of the hand-writing of the maker of such note is held sufficient. And the oath or affirmation of any disinterested credible person, proving the payment or delivery of any *money, goods, or effects whatever*, by any merchant or trader, in any of the United State or foreign country, is good evidence to show the price of said goods or wares, and the assumption to pay therefor: *provided* that the merchant or party bringing suit for said money, goods, &c., shall, at or before the time at which defendant ought to plead, make oath or affirmation, either in this State, or as above directed, that the goods, money, &c., were delivered as charged; and that he has not, to his knowledge or belief, received any payment or satisfaction therefor, other than what is accredited and appears in the so-attested account; and that he has not received any security therefor, and that the balance charged and claimed is truly and justly due.

IV. CHOSES IN ACTION

Are personal rights to things not in possession, but recoverable by suit at law; including, among others, money due on bond or note, under a will, in the distribution of an estate, upon a judgment, or as damages for breach of contract. The regularly constituted (in writing) or equitable assignee of these choses in action (for the payment of money) may maintain a suit for them in his own name.

But, with the exception of a note *not yet due*, he takes them subject to all the equities of set-off, &c., to which they were liable between the original parties. The debtor is allowed against the assignee all legal or equitable defence which he might have had against the assignor. It would seem, however, that in order to give the assignee of a debt, or balance due on *open account*, the right to sue in his own name, the debtor must have notice of such assignment, and (at least impliedly) promise to pay the assignee. Difficulty in most cases can be avoided by bringing suit in the name of the original creditor "to the use of" the assignee. Bonds, or other obligations under seal, and assigned under seal, may be sued in his own name by the assignee; not only, as above, against the original debtor, but against the assignor of such bond, &c., *provided* the original debtor is unable to pay, or cannot be found; and *provided* the holder was not a surety on such bond, &c., or has not, by his own default, lost the debt.

V. OF PERSONS CAPABLE OF CARRYING ON TRADE.

In Maryland there is no restriction in regard to the personal capacity of any citizen to carry on any business or trade, except the usual disabilities of *infancy*, &c., (to 21 in males and 28 in females)—and the municipal regulations in regard to licenses, &c.

VI. PARTNERSHIP.

If a person, in lieu of compensation for his services as *agent* or *clerk*, receive a fixed share of the profits (as such, so as to entitle him to an account) of the business in which another is engaged, he is liable to third parties as a partner. Yet it would seem that if one stipulate to receive, as the reward of his services, (not a specific interest in the business, but) *a sum of money*, even in proportion to a given *quantum* of the profits, he is not to be consid-

ered a partner. A distinguished English judge said he regretted this (extremely fine) distinction, but regarded it as clearly settled.

A judgment recovered against one or more members of a partnership, or joint obligors, upon any bond, bill, or note, &c., does not extinguish the cause of action as against the other members or obligors; and does not exempt such remaining partners or obligors, not bound by such judgment, from their liability.

Limited partnerships, in which the special partners shall not be more than six, are authorized for the transaction of any manufacturing, mechanical, or mercantile business, except insurance and banking. Certificates, signed by all parties, of the payment by the special partners of their share of the capital, (of which fact there must be affidavit,) must be acknowledged, filed, and recorded. In consequence, such special partners are not liable beyond the sum so paid in, *provided* they do not undertake to act as general partners, and provided a copy of the above certificate be published in the papers designated in the act.

VII. CORPORATIONS,

For the most part, are created by special act of Assembly; but in 1846, a law was passed by which any association, whose joint capital should not exceed \$10,000, lodging in the County Clerk's office a copy of their articles of association, signed by all original members, and there recorded, may become thereby a body corporate for any lawful purpose, *except* for carrying on *banking, insurance, trading, mining, &c.*, or for accumulating profits with a view to dividend or gain. By a previous act in 1838, every act of incorporation of manufacturing and mining companies, thereafter passed, is to be at all times subject to the revision, control, and repeal of the Legislature, unless therein be contained a special provision to the contrary. All such charters must provide for at least five directors, shall continue for not more than 30 years, and the books, property, and condition of such companies shall be subject to the inspection of the Legislature. The directors of such corporations who are present at, and do not dissent from, the adoption of any arrangement or contract exceeding the market value of such company's assets, are individually liable, in proportion to the amount of stock they hold, to the creditors. And in case any dividend beyond the actual profits is declared, the directors declaring, and the stockholders (except in trust) receiving such dividends, are also liable to the same extent.

There is a further provision in this State to prevent any fraudulent or improper portioning out of the shares, by any large stockholder, or number of them, so as to obtain any unfair or undue control of the corporation by such means.

Of course, any foreign corporation bringing suit in the courts of Maryland must produce a properly authenticated copy of its charter. Foreign insurance companies of every kind, maintaining agencies in this State, must pay one hundred dollars for an annual license, and 3 *per centum* on the amount of premiums by them received; said agent to give bond, in the sum of \$5,000, to make just and true returns of all such premiums.

VIII. AGENTS AND FACTORS.

Any payments of money, transfers of property, &c., or other dealings had, to or with any agent properly constituted (by power of attorney or otherwise) by persons in this State, are valid and binding on the representatives or as-

signees of the principal, notwithstanding his previous death, or transfer of his interest, *provided* the said death or transfer is unknown to the agent or purchaser at the time of such payment or dealing.

By the act of 1825, the consignee of any goods or merchandise, shipped in the name of any agent or person entrusted with them for consignment or sale, shall be entitled to a lien thereon, for any advances to such agent or person, or for any money or negotiable security received by such agent or person to the use of such consignee; *provided* the consignee shall not have notice, by the bill of lading or otherwise, at or before the time of said advance or receipt by agent or person, of the true and real ownership of such goods.

Persons having possession of bills of lading, warehouse receipts, inspector's certificate, or other document showing or entitling to possession of goods, shall be deemed to be the true owners thereof, so as to make valid any sale or any deposit thereof as security for a loan or advance made on the faith of such certificate or documents, *unless* the party buying or loaning on such goods have notice, by such document or otherwise, that such parties are not the owners thereof. Contracts for sale by agents of goods, &c., so consigned or entrusted, are made valid against the true owners, although the agents are known to be such, *unless* it be *further* known that such agents had no power to sell.

Any person or body corporate receiving such goods, *certificates, &c.*, in *pledge* as a security for any debt existing before the time of such deposit, shall acquire and enforce such right only, and lien thereon, as the person or agent depositing might have had and enforced; and this right, such persons, &c., may have, although they knew the pledging party to be an agent or factor, *unless* they *further* knew that he had no authority from his principal so to deposit or pledge. It is further provided that the real owner of such goods may recover them from the agent before they have been sold or pledged, or from the trustee of such agent, in case of insolvency, in preference to all other creditors; and they may also recover them *after such sale or pledge*, (themselves receiving the pay in case of a sale without payment,) subject, of course, to the set-off of the purchasers or pawnees against the agent as stated below, on tendering to the pawnee the amount advanced. For which advance, so paid by them, the owners shall have credit in any debt due by him to the agent, against whom he has still his remedy on breach of any contract between them, a violation of any duty or engagement undertaken. Where, after a contract by an agent for the sale of goods, and delivery thereof, *and before payment by the purchaser*, the agent shall become insolvent, the real owners of such goods shall be entitled to receive from the *purchaser* the money by him agreed to be paid to the agent—*not* subject to set-off against the agent, *unless* it shall have arisen against the agent, as factor of that *particular principal*, or shall have arisen from previous advances of money, &c., for the *benefit of such principal or owner*.

No set-off of a debt due by a factor or agent shall be allowed in favor of any purchaser or pawnee, against the owner or principal, unless such purchaser or pawnee shall have bought or received the goods *in ignorance* of the factor's want of authority to sell or *pledge* the same.

IX. SHIPPING—PART-OWNERS.

The Courts of Chancery (including the County Courts as such) have as full jurisdiction in cases of part-owners as in cases of partnership; and upon

application of any part-owner therein, have power to direct the sale of any ship, vessel, or steamboat, and apportion the proceeds according to the interests of the parties—*provided* the bill asking such sale is filed in the county where defendant resides. The apparent owner, under an absolute bill of sale of a vessel, cannot be allowed to prove that it was intended only as a mortgage, in a suit against him by a material man for supplies furnished such vessel.

J. R. P.

ART. VI.—PROTECTION OF SHIPS FROM LIGHTNING.

TO FREEMAN HUNT, Esq., *Editor of the Merchants' Magazine, etc.*

DEAR SIR :—I am glad to see that this very important matter is occupying the attention of active, enlightened, and benevolent minds. Dr. Joseph Johnson,* of South Carolina, brother of Mr. Justice Johnson, of the Supreme Court of the United States, in July last addressed to the writer a letter in reference to the protection of vessels against destruction and damage by lightning. I have since then received several letters from him on the same subject, and also the model of a ship's mast protected by copper lightning plates. Capt. R. B. Forbes, of Boston, a practical navigator, whose bosom is overflowing with the milk of human kindness, addressed me a letter referring to Harris's permanent conductors for the protection of vessels from lightning, and since then I have received from him a printed pamphlet on the same subject, and the loan of a book published in England by W. S. Harris, a gentleman who has devoted many years to this important subject in its practical operations. Capt. Forbes has recently forwarded me a Boston newspaper containing a notice of the arrival of one of W. S. Harris's permanent conductors for protecting ships, and he is now prepared to introduce these protectors into use on board of American vessels. I am exceedingly glad that this important matter has been taken hold of by such able hands. It is a subject worthy of the best efforts of the human race, and of the noblest energies of the philanthropic breast. In the February number of the *Merchants' Magazine* I notice an able and valuable communication from Francis O. J. Smith, Esq., of Portland, Maine, on the subject of protecting ships from damage by lightning.

I have heretofore avoided reading opinions of writers upon electric phenomena, preferring to study nature's great volume and learn of the great Teacher. Recently, however, I have read Dr. Johnson's remarks, those of Capt. Forbes, and those of Mr. F. O. J. Smith, and some of the books published in England by W. S. Harris, and it is very gratifying to find in all of them some one or more particular conclusion arrived at, corresponding with those expressed by me. I was not aware that metallic tubes had ever been recommended, and when I suggested the use of metallic tubes for lightning conductors, I supposed I was in advance of others. I am indebted to the lightning for the suggestion, in the evidence it so frequently gave, of its preference for the inside of tin spouts to every other conducting surface. I have had a tolerably extensive correspondence with Professor Olmsted, of Yale College, on the subject of electricity, and occasionally with Professor Henry, now Secretary of the Smithsonian Institute. I have had one interview with Mr.

* For a letter from Dr. Johnson to the Editor, see *Merchants' Magazine*, vol. xx., No. 1, page 71.

Quimby, of New York, who has erected more than 2,000 lightning rods, none of which have failed to protect life, and only one of which failed to conduct all the lightning, and this one was an exception from being in contact with a tin spout, the lightning preferring the spout to the rod.

It is indeed remarkable, and more, it is wonderful, that while the evidence of the absolute protection, by metallic rods and plates, to life and property against lightning is so clear and so conclusive, that so few vessels are furnished with these absolutely necessary appendages.

In the early morning hour, when all was still and quiet around me, I have had before me the narratives of the destruction of the packet ship *Poland*, and of the packet ship *Thomas P. Cope*, by lightning, upon the ocean, the reading of which was enough to agitate my bosom and move my pen to endeavor to arouse a feeling in the bosoms of my fellow-men that might kindle up an interest that would prompt navigators to use the means designed by Providence for the protection and preservation of human life amid the fire of the storm and the "lightning of the thunder."

I have collected together a large mass of facts, illustrating electric phenomena, but the arranging of these in a plain and intelligible form requires more time than I have yet been able to command. I hope, however, if health is continued to me, and life is prolonged, that I shall, by-and-by, be able to place these before the world, classified so as to be easily and readily examined. The facts will then speak for themselves. It is the record of facts we need, and the lightning is prolific in this—it generally leaves a record that can be easily read by the intelligent mind.

I do not intend to discuss or advance any theory with regard to lightning, or to attempt to designate or suggest how many members there are of the electric family, or to distinguish which are Neptunian, which terrestrial, or which are atmospheric. The ocean, the earth, and the atmosphere, each have been endowed with peculiar energies by the Creator of the universe, and it behooves the humble and persevering searcher after truth as it is in nature, to be diligent in learning of nature and recording facts, for in these is a treasury of knowledge.

I have been a frequent visitor of the Mammoth Cave of Kentucky, the greatest cavern yet discovered in the earth's body. In this cave, which extends leagues under the surface of the earth, there is no visible electricity that coruscates; the sound of thunder is never heard there, nor the lightning's vivid chain ever seen in this nether territory.

I have been an inhabitant of the high mountain peak, and slept above the clouds. There I found nature instructive. The waters that reposed on the earth's surface beneath me, in the distant field of vision, gave testimony. In the early morning hour, when the atmosphere was clear and human vision reinforced by the stimulus of the ethereal essence, which there gently heaved the human breast, I could, from the great height through the clear atmosphere, see columns of vapor ascending from bodies of water, like smoke from a chimney. A lightning cloud passing over and touching two of these columns of vapor would give out its electric discharge with heavy detonations; hence we find trees on dividing ridges more frequently scathed by lightning. New Haven, Connecticut, is more frequently visited by lightning discharges than any other locality I have a record of. Here are three rivers entering the harbor from three different directions, presenting three columns of vapor at the same moment to the cloud.

In a recent meteorological and geological tour I visited a range of high

ground in this State, from which the waters run south to the Chesapeake Bay, and north to the Gulf of the St. Lawrence. Here the trees gave testimony—very many were scathed by the electric energies.

I ascended the white face peak of the Adirondack in October last, and searched in vain for a tree scathed by lightning on the sides of this high mountain.

My very minute lightning record shows a great difference in the effect of lightning storms upon the temperature of the atmosphere. Most generally the temperature is lowered, but sometimes the heat increases as soon as the storm is over.

In extensive wilderness explorations for a period of near forty years, I have had great opportunities to consult the trees of the forests, and the rocks that lie upon the surface, as well as those that lie imbedded in the ground, relative to lightning visitations. Occasionally, but rarely, I found a tree giving evidence of heat by being burned by the lightning, but I have never found an instance where the lightning escaped on the limbs. Had the lightning taken such a path the limb would bear the imprint—it would be scathed by the lightning. The lightning in all cases follows the grain of the wood. I have seen trees where the lightning has left one path and gone on another, and many cases where the lightning has struck several trees at the same time.

I have seen rocks that lay upon the ground rent asunder by lightning. I have seen others that were broken and others that were cracked, and the latter result I have noticed in some rocks imbedded in the earth.

I have recorded on my register cases of lightning visitation to sand banks. Mr. Darwin mentions cases where the lightning penetrated deep into the sand and fused the earth in its path, forming a vitreous tube of many feet in length, inside smooth, outside shrivelled, like the bark of a tree. These tubes give unerring testimony as to the angle of descent of the lightning, sometimes a little leaning from the perpendicular, but generally vertical. One case he mentions where the lightning turned back, making an acute angle of 26° , and came out of the ground above the surface, leaving a record of its whole travel under ground in the shape of the tube, which remained to be a witness and a testimony in this.

It is said that beach trees are never struck by lightning. My record contains the particulars of a few of this kind of tree that have been scathed by lightning.

Feather beds are said to be protection, but I have accounts of persons who have been killed by lightning while reposing on feather beds, and a case recently where a person removing a feather bed from the roof of a house was struck down by lightning.

My catalogue of destruction, damage, and injury by lightning is very extensive, embracing a statement of facts full of instruction and full of admonition; but mankind are wonderfully inclined to disregard the admonitions of the fire of the tempest, which comes with a speed next to that of thought. I recorded a case of destruction of a barn in Saratoga county, in this State, that was struck three times by lightning in different years, and the last time consumed with its contents. The ship Francis Depau, loaded with cotton, was struck by lightning in July last, and came into the port of New York to repair and for the purpose of examining the cotton, to ascertain if it had been ignited by the lightning. The vessel, after some delay, was repaired, and sailed again without lightning protectors. I have noticed a difference in the operation of lightning storms. Some produce conflagration whenever the

lightning strikes combustible matter ; others pass over a lengthy surface, striking frequently, but not igniting. I have noticed another class of lightning storms, and these are numerous, in which snow instead of rain is the companion of the thunder and lightning. There are some storms that discharge lightning of a deep red color, but in most cases the lightning is of the color of fused iron.

The distance which thunder can be heard or lightning seen, has never, that I am aware of, been accurately ascertained. In February, 1847, the lightning struck a house at Gravesend, about nine miles from my place of observation. The thunder which accompanied that electric discharge was heard at my place of observation, and the flash of the lightning seen. It was seen, and the thunder heard, at the Narrows.

Sheet lightning, as it is termed, which is seen best in the evening, I have found from observation is the coruscation of very distant thunder storms that are vertical at a remote locality.

It is sometimes the case that the electric discharge from the clouds follow each other in quick succession, and the flame of long continuance. I witnessed a thunder storm of this description in January, 1814, in the wilderness, in the State of Tennessee, near the banks of the Cumberland river. It was evening, and the darkness was great when the lightning began to kindle up its living flame. The thunder was terrific. Peal succeeded peal in such quick succession that there was scarce time for a thought to intervene between the detonation of one discharge and the crash of another, and the cloud presented an almost continuous blaze. I was alone and on horseback in a thickly timbered forest, and the lightning was a lamp to my path, and guided the horse I was riding and aided us to reach a place of rest.

I have at night, while reposing on my pillow, sometimes endeavored, during violent thunder storms, to count between the flashes of the lightning; but such is the effect of lightning upon me in such a position in the night, that I invariably fall into a sound sleep. I do not experience such effects in the day time.

I had intended to have given the record of vessels struck by lightning in 1848, 1847, and part of the year 1846 ; but that record is so lengthy that I shall be obliged to confine it to 1848, and leave that of 1847 and 1846 for another opportunity.

The 4th of February, 1848, the United States ship *Pennsylvania*, lying at Norfolk, Va., was struck by lightning. The ship was furnished with lightning chains, that conducted the lightning into the water without injury to the ship.

This thunder storm was of great duration, and lasted from 8 P. M. till midnight. Snow fell at the same time in various localities. At my place of observation, the temperature of the atmosphere was in a state of perfect *equilibration* from 7 P. M. of the 3d, till 9 A. M. of the 4th, at 36°, with a single fluctuation at 8 P. M. of the 3d, of 1°; on the 4th, it became *equilibrated* at 34° at 3 P. M., and continued in that state, without a particle of change, till 1 P. M. of the next day; at 2 and 3 P. M. of the 4th snow fell, mixed with rain; and at 4 and 5 P. M. snow fell. Frigorific lines were running in the high atmosphere at 9 and 10 A. M. of the 3d, from S. W. to N. E., and speckled clouds were visible in the south-east at 3 P. M. A distant earthquake was doubtless the companion of this state of atmosphere. The clouds were luminous. On the 6th, a cold cycle commenced running at my place of observation between 2 and 3 P. M., and continued to between

the hours of 8 and 9 A. M. of the 10th, 90 consecutive hours; after a rest of 9 hours, a twin cycle commenced running from between the hours of 6 and 7 P. M. of that day, and continued to the 14th, between 12 M. and 1 P. M., 90 consecutive hours. The *minimum* of first cycle 18° , second 12° ; the maximum of both circles 32° , as measured by the meteoric, magnetic, and electric wires, which have galvanic appliances and caloric terminations, with the exception of the vertical termination of the electric tubes.

On the 23d of February, 1848, a terrible lightning storm, mixed with hail, was experienced at the South-west Pass of the Mississippi. The tow boat De Soto, and also another steamer near by the De Soto, were struck by lightning. The only injury was on the stern of the boat, and this was trifling.

The same day there was a heavy storm of thunder and rain on the Cumberland Mountains. At my place of observation, the temperature was at 35° from 1 P. M. of the 22d to 8 P. M. of the 23d, being an *equilibration*, and the ground was freezing, and ice formed on its surface, although the temperature of the air had not been so low as 35° from 10 A. M. of the 19th to 1 P. M. of the 22d, nor below 35° till after 5 P. M. of the 24th. The steamer Magdalena, in the river Magdalena, S. A., exploded her steam boiler on the 25th.

On the 29th of February, at a little before 1 A. M., the ship West Point, bound from Liverpool to New York, with 300 passengers, was struck seven times by lightning in 30 minutes, and two of her men were killed instantly. She was in latitude $38^{\circ} 30' N.$, longitude $67^{\circ} W.$ I examined this ship. She had 300 tons of iron, and over the iron were the passengers, none of whom were injured. The bulwark railing was covered with sheet copper and mixed metal, extending from near the centre of her stern, on the starboard side, the whole length of the vessel, including the bow, and on her larboard side to the stern, within a few feet of its centre. The ~~blade~~ railing was also covered with copper, and the stairs on deck leading down amid-ship were covered with the same metal. The rail to the stairs was of brass. One man was killed by lightning while passing up the stairs between the copper of the ~~blade~~ railing and that of the bulwark railing. It is quite probable that his feet were on the copper of the steps, and his hands on the metal railing of brass.

The other man was killed while handling the metal ~~blade~~ pins, in contact with the copper bulwark railing. The officers on board the ship informed me that the electric discharges were very close, and like the discharge of cannon from a ship along side. It was a fearful, dreadful, awful storm. The ship had no rods. On that day, at 7 P. M., a cold cycle commenced running at my place of observation, and continued till 1 P. M. of March 4, 89 consecutive hours, a fraction of each of two hours making 90. At 4 P. M. of March 4 another cold cycle commenced running, and continued till between 12 M. and 1 P. M. of the 6th—44 hours and a fraction of each of two hours, making 45 consecutive hours, or half 90.

An aerotate or meteorite exploded the morning of the 6th at Nantucket, Massachusetts, which probably terminated the cold cycle in the middle at 45 hours. The 90 is a quarter of $360-45$ an eighth.

April 19, at 5 A. M., the brig Rebecca C. Fisher, from Apalachicola for New York, loaded with cotton, was struck by lightning near Squam Beach, set on fire, and with her cargo consumed. The officers and crew were providentially rescued by the British brig Margaret at 5 A. M., that came to their

assistance. Next morning passed the brig R. C. F. burnt to the water's edge, 50 miles from the Highlands. *The vessel had no lightning rod.* There was a shock of an earthquake at St. Martin's on the 17th, and another at Jamaica on the 21st.

May 2, lightning struck the foretop gallant-mast of the bark *Shakspeare*, lying at Charleston, S. C., and shivered it to pieces.

May 10 to 13, both the Eastern and Western Continents were greatly agitated by earthquakes. The atmosphere was also extensively affected by storms of lightning and thunder, hail, snow, and rain; boreal coruscations lighted up the north, and volcanoes became active in the Island of Java, followed by earthquakes. At Louisville, Ky., on the 10th, a squall came up, formed of a cloud of white flies, which was at first mistaken for snow. These insects fell in countless billions of billions. On the 11th, 12th, and 13th, there were a continuation of earthquake shocks at Sienna, Tuscany, Europe; on the 11th, in the East Indies; on the 11th, at Valparaiso, S. A.; and the same day at the Island of Jamaica, in the West Indies. Frosts were active and destructive during the same period in various places; and on the 14th the packet ship *Garrick*, off Nantucket Shoals, was *twice* struck by lightning, which shivered the head of the fore topgallant mast, tore the foresail and foretopsail, and did other damage. Ship *Victoria*, from Antwerp, off Nantucket Shoals, the same day, was *twice* struck by lightning, which set on fire the main royal and killed one seaman.

May 16th packet ship *Ocean*, from Liverpool for Boston, was struck by lightning, which shivered fore royal topmast. The same day the *Mountain Kiech* in the Island of Java, became convulsed, and broke out in a volcano.

May 20th British brig *Waterloo*, off New Haven, Conn., was struck by lightning. One seaman instantly killed.

May 23d earthquake at Montreal, L. C. Same day, the steamer *Halifax*, on Kennebec river, exploded her steam boiler. Thunder and lightning, storm and tornado, same day in Michigan.

May 26th earthquake in the East Indies; and on the 28th, steamboat *Andrew Kenney* burst her boiler on the Tombigbee river, Alabama, and same lightning storm at Springfield, Massachusetts.

June 1st steamer *Illinois* was struck by lightning on the Mississippi river, opposite St. Louis, and her stern a little injured. Same day snow fell at Franconia, Littleton, and Gilmanton, N. H., and at Gloucester, Massachusetts, the temperature at 9 P. M. being 16° lower than at the same hour on the first day of January. The same day the iron steamer *Ariel*, from Malta for Leghorn, struck the rocks of Mal de Vetra, in Tuscany, thirteen miles from Leghorn Light.

June 7th ship *Espinalle* was struck by lightning in lat. 32° 22' N., lon. 77° W., the lightning doing much damage.

June 20th brig *Rodney*, of Bucksport, Maine, in lat. 33° 50', or 35° 30', capsized by a waterspout. Captain and crew landed at Cape Hatters. Lightning had been active, of a great extent of surface, for several hours preceding and succeeding this catastrophe.

July 1st pilot boat *Four Sisters*, near Sands' Point, was struck by lightning and sunk. The lightning passed out through the sides of the vessel, under water, making perforations like bullet holes, filled with slivers and splinters. The vessel was raised. She went down, stern foremost, in about five minutes after she was struck. No person on board injured. I have this account from Ex-Alderman Guion, who was on board.

July 6th ship *Francis Depau*, from Mobile for Liverpool, loaded with cotton, was struck by lightning in lat. $35^{\circ} 23' N.$, lon. $72^{\circ} W.$, at 11 A. M. The masts were injured, and she was obliged to put into New York for repairs. The captain and crew were alarmed, and expected the cotton had been ignited. She was detained several days for repairs, and sailed again *without rods!* I examined this vessel in port. Her copper on deck probably saved the cotton from being ignited. Thunder storms were experienced that day over a surface of 1,000 miles in extent.

July 13th the steamboat *Suffolk*, lying at Fort Hamilton, Narrows, was struck by lightning during a thunder squall. All the persons on board, above twenty, were in the cabin. They were not aware that the boat was struck until they came on the upper deck. The flag-staff at the stern was broken in pieces, the centre beam which supported the awning was split and splintered, the awning cut and scorched, one of the iron clamps thrown into the sea, the bell rope nearly cut off, and some paint or verdigris converted to bronze. The seats and benches were torn up, and some of them broken. I examined the boat, and the above statement is a memorandum of what I saw. The awning beam was braced by iron rods, painted white, which connected with the deck; but the lightning ran on the beam horizontally, in preference to descending the painted rods. The boat was lying at the dock, but the engine in motion.

The schooner *Gipsev* was struck by lightning in July, 1848; extent of damage not reported.

A schooner, lying under Brooklyn Heights, was struck by lightning June 19; damage not stated.

July 30th British brig *Barbara*, in lat. 35° , lon. $75^{\circ} 15'$, was struck by lightning and set on fire.

August 11th schooner *Benjamin Harrison*, lying in the stream near Charleston, S. C., was struck by lightning in the night. The lightning shivered the foremast, then descended into the hold, starting some of the plank, splintered several of the timbers, and passed out of the cabin windows. The captain and crew were in the cabin at the time, and stunned by the shock.

August 13th brig *Magella*, bound from Wilmington, N. C., to Boston, was struck by lightning. Her main topmast and pumps were split, the deck considerably torn up, the gaff topsail torn to pieces, and the mainsail badly injured. At the time the lightning struck the vessel, one of the men was hanging out a shirt; it was rent in pieces in his hands, but he escaped uninjured. The same day the steamboat *Botts* burst her boiler on one of our Western rivers, and the day previous the steamboat *Robert Weightman* burst her boiler also on one of our Western rivers. The state of the earth and atmosphere from the 7th of August to the 22d, was extensively affected. On the 7th an earthquake shock was felt at Fort Kearny, Miss., and for 100 miles below, and as far above as any settlements extend. On the 8th a marine volcano, in lat. $37^{\circ} 30' N.$, lon. $1^{\circ} 40'$. The same evening the north was lighted up with boreal coruscations, which were visible from the head of Lake Erie to the Gulf of the St. Lawrence. The morning of the 9th a terrific thunder storm, of great duration, was experienced at New Orleans. On the 14th, a meteorite was seen to pass over Sullivan county, New York. On the 15th, earthquake shocks at Montevideo, S. A., the first ever experienced there. On the 17th, thunder storm from Maine to Louisiana, and thence from the Island of Great Britain, entirely across our continent, to Louisiana; earthquake at St. Lucia; 19th, earthquake at Montevideo, S. A.; 20th, great

storm of thunder and lightning at Paris, France—lightning struck in Paris in eighteen different places; 21st, frost at Franconia, N. H., in the morning, and boreal lights in the evening; three shocks of an earthquake at the island of St. Kitts; and the next morning an earthquake at Antigua, attended by a hurricane, and by thunder and lightning.

I have also, in my record of 1848, the case of the schooner *San Jacinto*, struck by lightning at Albany; of two vessels struck by lightning at Baltimore, in June, shivering their mainmasts; of a schooner of one of the great lakes, struck by lightning; schooner *Roswell King*, struck by lightning; and ship *Robert G. Shaw*, also struck by lightning.

I have memorandums of others during 1848, which have been struck by lightning, the accounts of which are not yet made up.

None of the vessels which I have mentioned were furnished with rods, except the United States ship *Pennsylvania*.

The case of the United States ship *Albany*, struck by lightning September, 1848, I stated in my memorandum, published in January. The vessel was protected, but the rods destroyed.

Art. VII.—"THE COAST SURVEY OF THE UNITED STATES."*

A REPLY TO AN ARTICLE, WITH THE ABOVE TITLE, IN THE FEBRUARY NUMBER OF THE MERCHANTS' MAGAZINE, BY LIEUT. CHARLES HENRY DAVIS, U. S. NAVY.

To the Editor of the Merchants' Magazine, etc.

DEAR SIR:—If the advice of Mr. Burke, "to outlive scandal, is the best mode of replying to it," were as applicable to institutions as it is to individuals, there would be no occasion for any notice of the attack upon the Survey of the Coast of the United States, contained in the February No. of this Journal. The attack and its author might be left to the judgment of time, which tries all such offenders, and to the power of truth, which must ultimately prevail.

Or it would be quite sufficient, if any comment were made, to rely upon authority, and to oppose to the sneers and imputations of an *anonymous* writer, the unqualified approbation and support freely awarded to the Coast Survey, and its distinguished head, by such institutions as the American Academy of Arts and Sciences in Boston, the Philosophical Society and Franklin Institute of Philadelphia, the University of Virginia, the Marine Societies and Chambers of Commerce in almost every Atlantic city, from Boston to New Orleans; and besides these, the memorials of the principal merchants and underwriters in the northern capitals. From one class of these authorities we should learn that men of science, who are fully competent to give an opinion on the subject, do, after mature and careful examination, entirely approve of the fundamental principles upon which the survey is conducted, and of all the methods and processes by which those principles are brought out in practice; and from

* In accordance with the principle, to which we have uniformly adhered, of keeping the pages of the *Merchants' Magazine* open to the free and fair discussion of all topics falling within its scope, we are willing to give place to the following article, in which views, differing altogether from those set forth in the Historical Notice of the Coast Survey of the United States, and its Management, published in our February number, are taken of this important branch of the public service. *And citum portum.*—*Ed. Mer. Mag.*

the other, that the Coast Survey, as it is at present established, has heretofore rendered, and continues to give, to commerce the most important facilities and improvements. He who opposed his own assertions, with or without a name, to such an array of authorities, would subject himself to the sarcastic remark of Dr. Johnson, that "the man who attempted to prove everybody else wrong, succeeded at least in proving one person to be in error." It can hardly be imagined, even by the most skeptical, that so many men of high literary, scientific, and social standing would combine to misrepresent, or to conceal the truth, still less that they are ignorant of the matter about which they have written.

But while we record here the cordial and valuable support which the Coast Survey has received, during its recent troubles, from generous friends in every quarter of the country, we must not forget that it is a part of our obligation to those friends to relieve the institution, concerning the management of which they have assumed a certain responsibility, from any suspicions of impropriety, however unfounded.

To justify its character and conduct, is a part of its debt to its supporters; and, disagreeable as the task of a reply must be to ourselves, we enter upon it as an act of duty.

And first, we wish to call the particular attention of those who have read the paper referred to, to the temper with which it is written. It is characterized by nothing so strongly as its merely personal ill feeling towards Professor Bache, the present Superintendent. This is the one trait, before all others, which marks its tone and spirit. Sneers against his capacity are freely indulged in; accusations are brought without reserve, or stint, against his personal and official integrity; and the basest motives of conduct are ascribed to him without even the observance of the most ordinary courtesies of language. To these things we do not intend to make any answer. They need no answer.

An established reputation for learning, usefulness, and honor, like that of Mr. Bache, is of itself a sufficient defence. The lustre of a good life cannot be tarnished by a single breath of scandal, uttered by a mouth which refuses to pronounce its own name. This is not the cause of one man, but of all good men. It is the cause of society, which cannot, for its own sake, suffer that an honorable name should be affected by anonymous attacks of this kind. There is no necessity for a reply here; and, moreover, we are admonished that we should not answer such a writer according to his folly, or otherwise, lest we become like to him, or he be made wise in his own conceit.

But there is one comment which it seems worth while to pass upon this portion of our opponent's writings. If one-half of what he asserts is true, why did he not bring the subject, with the authority of his name and position, under the notice of some member of the Executive Government, or under that of Congress? It was surely no charity to Mr. Bache that prevented this mode of action. The Coast Survey is a public institution, immediately responsible to the government; its records are open to examination, and its reports are distributed throughout the country.

If those abuses exist which the writer pretends to point out, it cannot be but that there are men of sufficient patriotism, intelligence, and independence, either in the administration, or in Congress, to demand their correction. This view is worthy of reflection with those whose minds have been at all affected by the writer's statements. But the writer preferred to preserve his inco-

nito, and we entirely disclaim all present desire to penetrate any farther than we have already done, into the heart of his mystery.

Although we have thought it due to the friends of the Coast Survey to make some reply, yet it would be tedious and unprofitable to follow the writer through every paragraph of his paper.

After showing some of his errors and misstatements, we may claim the benefit of the legal maxim which is applied to incompetent witnesses. The writer, in the course of some historical remarks upon the Survey, says, "that a geodetic operation, such as was commenced under its authority, had not been contemplated or understood by the government," in the original law creating the Survey of the Coast. (P. 133.)

We may suppose that the writer is unacquainted with the nature of a geodetic survey, and with the true history of this particular work. The general plan and purpose of this undertaking are laid down for the first time in a letter of Mr. Gallatin, addressed to the learned men of the country, whom he consulted as to the best mode of carrying out the provisions of the law of 1807. This general plan is defined in the following words:—

1. The ascertainment, by a series of astronomical observations, of the true position of a few remarkable points on the coast.

2. A trigonometrical survey of the coast between those points of which the position shall have been astronomically ascertained.

3. A nautical survey of the shoals and soundings of the coast, of which the trigonometrical survey of the coast itself, and the ascertained position of the light-houses, and other distinguishable objects, would be the basis.

It is not necessary to say to those who are informed upon such subjects, that this is the very language by which a geodetic survey, with a hydrographic survey attached to it, is accurately described. The connection, by trigonometrical measurements, of a series of points, spread over a seacoast of great extent, (like our own,) the position of which points has been independently fixed by a series of astronomical observations, is only a form of words by which the idea of a geodetic survey is conveyed. It is the extent of the coast which gives the geodetic character to the work. In the triangulation of so large a region, it is requisite to have a regard to the irregularly elliptical figure of the earth; in common surveying, the field is so limited, that the deviations of the earth's surface from a plane are not noticeable. And so also of astronomical determinations. In the great Survey, they must be multiplied, or constitute a series, on several accounts relating to the form and materials of the earth's surface, and to the necessity for remote verifications. In the limited survey, (as in the nautical survey of a harbor, or group of islands,) the independent astronomical determination of some one or two prominent points is generally sufficient.

In the former case again, the formulæ or rules for calculating the triangles embrace terms depending on the value of the earth's ellipticity, or expressions of the radii of the parallels and meridians. In the latter case, the rules for solving the triangles are simply those of plane trigonometry. Mr. Hassler, to whom, among others, Mr. Gallatin's letter was addressed, details in his reply the methods of conducting a *geodetic* survey.

The writer was probably not aware of these scientific distinctions, or he would not have made such an erroneous assertion.

Upon this point the writer makes elsewhere the following remark:—"At that time (1807) the word 'Survey' conveyed the notion of a temporary and limited operation." (P. 132.) He is probably not aware that the trigono-

metrical survey of Great Britain was commenced twenty years before this period; that the great meridional measurement of Mechain and Delambre was (the original section) then completed; and that Mr. Hassler, consulted by Mr. Gallatin, and appointed by him to superintend the Coast Survey, had actually taken part in the triangulation of the Canton of Berne. The meaning of the word "Survey," when applied to an extensive coast, *might therefore* have been known in this country, without assuming any remarkable merit on the part of Mr. Gallatin and his advisers. Mr. Hassler *might have* communicated the definition of the word *geodetic* to Mr. Gallatin; at any rate, it is very curious that the latter should have defined that word so exactly in laying down the plan of the Coast Survey in his circular letter, that his language could not now be improved either in precision or clearness.

We are very far from wishing to charge the writer with any deception here; but we think that we should be permitted to say, without rudeness, that a person as uninformed as the writer evidently is, should speak with less confidence. It is certainly no discredit to be ignorant of the history and nature of geodesy; but it is an offence against modesty, being ignorant, to attempt to instruct the public.

The writer seems to have a theory on this subject, one of the most important deductions from which was made during the lifetime of the late Superintendent. It was this; that no American could be found who was capable of filling Mr. Hassler's place. Yet the science of geodesy, in its principles and practice, is very complete, and is ably and comprehensively treated by several eminent mathematicians. We are led to think that this deduction was made to serve a purpose.

There is another subject upon which, also, the writer seems to indulge in theoretical views. He ascribes to the officers of the army and navy a desire to get possession of the Coast Survey after the civil *employees* had been dismissed from its service by the act of 1818.

"Under such circumstances," he says, "it was but natural that the officers of our army and navy should look upon a work like the Coast Survey as their peculiar property, and endeavor to place themselves at its head; and there is no doubt that the suspension of the work at that day, was in a great measure due to the operation of such a feeling." (P. 134.)

Here again the writer's theory is singularly erroneous. When the connection of Mr. Hassler with the Coast Survey was suspended by the law of 1818, and the great object to which he had devoted the energies of his mind was defeated, it was actually in the army that he found his warmest personal friends, and his most able public supporters. General Swift, of New York, (late of the Engineers,) and Colonel Abert, the present Chief of the Topographical Bureau, maintained towards him a strict and unswerving fidelity, which no temptations of personal or professional aggrandizement could lead astray.

And we must say that in this, these gentlemen acted quite as much after their own honor and dignity, as after Mr. Hassler's desert. During the latter, and very serious troubles of 1843, as Mr. Hassler's friends well know, it was only by means of the liberal, disinterested, and firm support of such men as Colonel Abert, Lieut. Col. Kearney, Major Turnbull, and Captain Swift, that he kept his office.

With regard to the navy, the case is equally striking. It was, in fact, the head of the Navy Department, the eminent Secretary from New Jersey, Mr. Southard, who procured the revival of the law establishing the Coast Survey,

and with his accustomed ability and high authority, advocated the unquestionable superiority of a connected system of operations, over the then existing (but now happily exploded) plan of detached surveys.

If these facts had been known to the writer, his regard for truth would undoubtedly have prevented him from indulging in speculations which reflect discredit upon these two branches of the public service. It is but just to the public, however disagreeable it may be to the writer, to say, that he should have known them; that it was his duty, having presented himself as an authority, to be acquainted with such well known facts in the history of the Coast Survey.

But, besides the wrong to individuals, and to the services, which is included in these errors, it suits our present purpose to notice particularly their moral effect upon the character of the writer himself. They betray a flippant carelessness in the statement of mere facts, which, taken in connection with his labored plausibility of style, and his amiable and amusing alliterations, makes him appear especially unsound as a public informer.

More conspicuous than all, are his strong personal dislikes. They are not only ardent, but general. He attacks Professor Bache in a manner which leads to the suspicion that he has had some personal or official contest with him. He sneers at Professor Henry, the Secretary of the Smithsonian Institute, as if towards him also he entertained a sense of personal injury. He says some very hard things of several of the assistants of the survey, both civil and naval; and finally, he includes the whole American Philosophical Society of Philadelphia in one severe and comprehensive denunciation. He seems, in short, to have taken his place in the seat of the scornful.

Now it cannot be thought either unreasonable or harsh in us to observe, (without committing the folly of attempting a reproof,) that this is not the state of mind most favorable to an inquiry into the progress and condition of the Coast Survey; that in the practical affairs of life we do not adopt, or rather we do reject, the opinions and declarations of those who are laboring under prejudices, and are controlled by strong resentments; and that the man who is so deluded either by his feelings, or in his judgment, as to regard Professor Bache as being no more than a "retired schoolmaster," when in fact he is, with one or two exceptions, perhaps, better known in Europe to such men as Airy, Hamilton, (of Dublin,) Smythe, Arago, Humboldt, &c., &c., for his contributions to science, than any other person in the United States—the man laboring under such a hallucination of his intellect (and we are not allowed to doubt that the writer speaks according to his *present* honest convictions) is not entitled to ask those who do not share in his anger, to accept, without qualification, his opinions.

We do not fail to notice how this unkindness is obscured by a gracious show of regard for the public interests, and a virtuous condemnation of assumed wrongs. But then again we see in the writer's declamations more of the impassioned earnestness, as well as some of the strategical skill, of warfare, than the calm and temperate dignity of the bench, and reminding the reader that

"There is no vice so simple, but assumes
Some mark of virtue on his outward parts."

We invite them to make their own estimate of the motives and qualifications of our opponent.

But it still remains for us to point out in detail some of his *mistakes*—we

call them by the most modest terms, for, like the pretended Sir Topas, we are one of those gentle ones that will use the devil himself with courtesy.

The most important point which the writer endeavors to make, is upon a comparison of the work executed under the late and present Superintendents, considered relatively to their means.

This is another of the writer's theories. We extract from his paper the following paragraph, the chief purpose of which, it will be observed, is to bring discredit upon the character of the present Superintendent.

"In taking the field in 1844, the Superintendent assumed the northern portion of the Survey, which had been carried to Point Judith by his predecessor, under the immediate charge of one of the principal assistants. The accuracy of the work thus far had been verified by the last line of the triangulation, agreeing, within a very small limit, (a fraction of a foot,) with the same line of Mr. Borden's triangulation, made for the survey of Massachusetts, and depending on another base.* In taking this part of the field, instead of leaving it to the assistant, who had so honorably and judiciously managed the preceding and more difficult part of the operation, the Superintendent not only secured himself an easy and healthy country to operate in, but he had before him the points already established by Mr. Borden, each marked with a monument. He had also Mr. Borden's results to compare always with such as he might derive himself; and, moreover, he had with him one of Mr. Borden's assistants, who knew the country, and thus spared him any trouble of reconnaissance. Indeed, it is known that an attempt made by this assistant to change a principal line of Borden's triangulation, though made at great expense and loss of time, altogether failed; thus showing clearly the ability with which the points of the previous triangulation had been selected. The Superintendent, in the four years of his personal field work, has scarce yet passed the limit in which Mr. Borden had preceded him; and if it be ever judicious in such matters to raise questions of economy, it might be well worth asking whether the work done in the field by the present Superintendent, at immense expense, has been necessary at all.† To the assistants were assigned the more southern portions of the work; and two bases of verification, near the extremities of the triangulation, which had been furnished by Mr. Hassler, were measured by them in 1844."—Pp. 140-1.

To which we make the following reply:—

When the present Superintendent came upon the Survey, he found the first section of the work nearly completed, and he thought he would best meet the views and wishes of Mr. Hassler's friends by assigning to his principal assistants the closing up of that part of the work which had been commenced, and mainly performed, under Mr. Hassler's direction. Accordingly, one of the two principal assistants was sent to the Chesapeake to measure a base of verification, and connect it with Mr. Hassler's main triangulation; whilst the other one measured a base of verification on the eastern end of the work, and reconstructed the northern part of the main triangulation (which was necessary) in Delaware Bay. On taking up the main triangulation on the north, to begin a new section of the work, Mr. Bache only assumed his proper place as the head of the Survey. The scheme of this main triangulation differed, essentially and necessarily, from that of Mr. Borden; and of sixteen stations occupied at the north by Mr. Bache, only five were identical with those used by Mr. Borden. Mr. Bache did not compare his results with those of Mr. Borden; the means and instruments of the latter were so far inferior to those of the Coast Survey that such comparison was not desirable. The statement of an attempt to change a principal line of Mr. Borden is a *mistake*.

* This close agreement of Mr. Blunt's with Mr. Borden's work is nowhere spoken of in the Coast Survey reports; nor is there a single atom of credit given to Mr. Borden, though it is said that he was one of the applicants for the superintendence, and withdrew his claim in Dr. Bache's favor.

† At the stations of the main triangulation, under the present superintendence, there are usually thirty tents, with the corresponding equipage.

The Superintendent has passed far beyond the limits of Mr. Borden's triangulation, into the States of Maine and New Hampshire. It is implied in the extract that this comprises the whole personal field work of the Superintendent. So far is this from being the case, that Mr. Bache has measured two bases—one on Dauphin Island, (Alabama, coast of the Gulf of Mexico,) and one on Bodie's Island, (North Carolina,) besides connecting the Chesapeake with Washington by triangulation—for the determination of the first meridian, and as a check on the secondary triangulation of the Potomac.

The note about the tent is striking, but unfortunately erroneous.

The following paragraph is also designed to illustrate our author's theory:—

"If the five years' work of the present Superintendent, with a *personnel* at least twice as large as the largest ever employed under the previous superintendence—as appropriation more than eight times greater than that with which the work began, and nearly twice as large as that with which the former superintendence closed—and with vessels and equipages furnished by the Revenue Bureau of the Treasury Department, to the amount of \$240,000, be compared with the eleven years' work done by his predecessor, it will be seen, even using the Superintendent's arithmetical process, that there is but little difference in the proportional quantities of work done. I exclude from this all comparison of the area of the primary triangulation. The reoccupation of Borden's triangulation put the Superintendent at once in the possession of triangles with sides of from eighteen to seventy miles in length, and superficial miles by the thousand were covered with more ease than hundreds in any other portion of the Survey."

1. The first two lines are erroneous. A reference to the table hereinafter given will prove this. In every case, except the topography, which has been judiciously curtailed by diminishing the distance inland to which the work is carried, and increasing the accuracy of the portions surveyed, more work has been done in five years than in the preceding twelve. The number of assistants has *not* been doubled. The appropriation has *not* been for the five years nearly double that with which the previous superintendence closed. No equipages have been transferred from the Revenue Bureau, and no vessel of that department was used, until 1847.

The writer excludes from his calculation the most important part of Mr. Bache's work—the most important in extent and valuable in results. In this part of the work it is strictly accurate to say, that the astronomical observations alone (which are but a single branch of the primary field-work) greatly exceed in number and intrinsic value *all* the observations of the *same* kind made by Mr. Hassler during the *whole eleven years* that he had charge of the work in active operation. In this connection it should be mentioned that the present Superintendent has in five years occupied as many primary stations, and measured twice as many bases, as the former Superintendent in twelve years. The "outer and more dangerous coast," which the writer elsewhere says "has not been touched," has been surveyed to the extent of twenty-eight miles *south of Cape Henlopen*. Great credit is due to Mr. Bache for commencing the work of North Carolina, with this very object of including the coast north of Hatteras. This is one of the conspicuous merits of his new system of operations, that such work can be begun separately, the final union with the other sections being deferred for the present. The survey is rapidly advancing to Cape Hatteras.

The error in the geographical position of Galveston, which Professor Bache has prepared to correct, has no doubt, as the writer asserts, existed. The shame and danger of it belong to another people. It is highly to the credit of Professor Bache that the Coast Survey moved into Texas in two years

an annexation, (it had no right to go there before,) for the very purpose of setting these errors.

The writer next engages in an argument, purporting to be based on statistics, to show that not as much work has been done under Professor Bache's direction as was accomplished by Mr. Hassler; which sums up, however, the very favorable admission, that the primary triangulation under Mr. Hassler's superintendence "covered a superficies of about 5,760 miles," the superficial miles of primary triangulation made by the present Superintendent up to 1847 will, by his estimates, amount to 7,803." This is very sufficiently complimentary to the industry of Professor Bache, when considered that Mr. Hassler's superintendence continued twelve years, that of Mr. Bache, up to 1848, only reaches a term of four years. The writer endeavors, as before, to discredit the utility of Professor Bache's survey by saying that it had been anticipated by Mr. Borden, in the trigonometrical survey of Massachusetts. This error has been previously noticed. The writer has appended to his statement a summary in a tabular form, and has forced this comparison, a correct table is given below, in which the quantity of work done under the superintendence of Mr. Hassler (a term of twelve years) is compared with that of Professor Bache, (for a term of four years,) in every variety of form in which it can be estimated. It may be regarded as an example of his very singular disregard for nice discrimination where the mistake is so palpable as to save the trouble of correcting it that the writer in this part of his article speaks of the alluvial shores of the north part of Massachusetts as "bold and rugged coasts," "rock-horeshores," and contrasts them, in this respect, with the sunken and sandy shores of the South, of which, in fact, they are the very type.

RESULTS OF THE COAST SURVEY AT DIFFERENT PERIODS FROM 1807 TO 1849.*

	From 1807-19.	From 1839-44. Mr. Hassler.	From 1844-49. Mr. Bache.	Total.
area, in square miles.....	560	18,103	22,544	41,307
coast line.....	450	14,483	19,309	34,242
shore line, including bays, sounds, &c.....	310	405	405	715
lighthouses, number of.....	3	11	47	61
stations, number of.....	10	88	98	196
geodesic stations.....	7	34	41	82
number of.....	1	4	5	10
primary base lines, number of.....	2	3	5	10
area, in square miles.....	8,922	2,755	8,977	14,654
shore line.....	6,100	4,055	10,155	20,310
area, in square miles.....	19,623	15,096	24,709	59,428
number of soundings.....	808,147	850,902	1,758,349	3,417,400
soundings, number of.....	1,410	1,410	1,410	4,230
fathoms of line.....	139,747	139,747	139,747	419,241
lines, number of.....	100	100	100	300
lines.....	13	40	53	106
of bottom, number of.....	300	4,008	4,598	8,906
number of manuscript maps.....	396	295	791	1,482
manuscript maps, No. prepared in office, being re-				
vised.....	89	193	132	414
topographical maps, number of.....	160	100	260	520
sheets, number of.....	908	131	459	1,498
hydrographical sheets, number of.....	103	79	175	357
hydrographical sheets, number of.....	34	.....	34	68
sheets, number of.....	236	160	396	792
triangulation, bases, &c., number of volumes.....	4	95	233	332
astronomical observations, &c., number of volumes.....	1	16	140	157
astronomical observations, &c., number of volumes.....	1	78	138	217
astronomical observations, &c., number of volumes.....	2	4	138	144
astronomical observations, &c., number of volumes.....	.....	4	37	41

Revised, No. 26. Senate. 30th Congress, 2d session. + 5,000 of off-shore work. † 11,000
work. § In sections III, IV, VIII, and IX, the primary and secondary triangulation are
general. || Coast line, including islands, bays, &c. ¶ 11,315 square feet of paper.
square feet of paper. †† 5,891 square feet of paper.

RESULTS OF THE COAST SURVEY AT DIFFERENT PERIODS—CONTINUED.

	From 1807-19.	From 1839-44. Mr. Hauser.	From 1844-49. M. Bache.	Total.
Magnetic computations, number of volumes.....	...		15	15
Geodetic books, duplicates " ".....	1	26	126	153
Meteorological books " ".....	...	2	7	9
" " duplicates, number of volumes.....	...		3	3
Original hydro'ical books, soundings, and angles, No. of vols.	...	179	369	548
Duplicate " " " ".....	...	27	32	59
Hydrographic books, tidal and current observations, and tidal reductions, number of volumes.....	...	8	129	137
Astronomical differences of longitude.....	...		66	66
Total of records.....	9	439	1,373	1,821
Engraved plates of maps, number of.....	...	5	24	29
" " electrotyped, number of.....	...		6	6
Published maps, number of.....	...		21	21
Printed sheets of maps, number of.....	...		24,949	24,949
" " distributed number of.....	...		7,678	7,678
" " sale agent ".....	...		12,979	12,979
Volumes in the library.....	...			66
Instruments, &c., value of.....	...			\$146,313

The writer endeavors to make it appear that it is a fault in Professor Bache to have instituted re-surveys, even where he knew that the old surveys were actually in error. It is evident from this, that he does not fully appreciate the strictly accurate and scientific character of the work.

The writer also, on the same page, declares that the field maps and sheets of reduction of Delaware and Long Island were erroneous; that the correction of the errors "has more than doubled the expense of the charts, and delayed for about two years their publication," and that this was the *fault* of an assistant, who at that time held the fifth place, and has since then been promoted, and now occupies the second place on the Survey. Now the errors, such as are imputed, never existed; the pretended expense and delay in consequence of them were never incurred; and the assistant referred to was promoted for distinguished merit in the field in a southern section of the survey, (Alabama, Mississippi, and Louisiana,) into which he was the first to carry its operations.

The writer, in this paragraph, asserts that "other assistants have been removed," or displaced, and implies that this has been done by the unjust and arbitrary exercise of power on the part of Professor Bache. But one assistant has been removed during the superintendence of Professor Bache, and he for causes which we forbear to state, after investigation before a scientific commission, consisting of Professor Pierce, of the University at Cambridge, (selected by Professor Bache on the part of the Treasury Department,) of Capt. Talcott, late of the U. S. Corps of Engineers, (selected by the assistant in question,) and of Professor Davies, late of the West Point Academy, (selected by Professor Pierce and Capt. Talcott,) the decision of which commission was signed by all the members, and approved by the Secretary of the Treasury.

Having, as we believe, disputed at sufficient length the writer's hypothesis, (originating, no doubt, in his patriotic regard for the public interests, and not at all in merely personal motives,) that Professor Bache is deficient in integrity and capacity, we will proceed to point out, in a very hasty manner, some other trifling inaccuracies into which he has accidentally fallen. We may attribute these inaccuracies solely to a want of judgment and knowledge on the part of the writer concerning the matters of which he treats, though doubtless he is well informed on all other subjects. We venture to hope that we may do this without incurring any serious displeasure, for we are "very comptible, even to the least sinister usage."

The writer *assails* (p. 19) the American Philosophical Society, and charges with delay and disrespect in the publication of Mr. Hassler's papers. By referring to the Transactions themselves, it will be seen that Mr. Hassler's papers occupy their place in regular order, with the exception of one short intervening article; and the precedence given to this last was owing, no doubt, to the unavoidable delay in preparing the engravings accompanying Mr. Hassler's papers.

Neither is it correct, as the writer says, that the American Philosophical Society constituted the only scientific journal then in existence. *Silliman's Journal* was published at that time; and the *Memoirs of the American Academy*, in Boston, made a scientific journal as much as the Transactions of the Philosophical Society.

The historical relation which follows, concerning the standards of weights and measures, is incomplete and inaccurate. The subject of standard weights and measures was first brought forward by Mr. Jefferson in 1790. (See *Exposition* of that year.) It was subsequently introduced by Mr. Izard, in 1791; by Mr. Jefferson again, 1795; by Mr. Harrison, in 1796; by Mr. Lowndes, 1819; and by Mr. Adams, (Secretary of State,) in 1822. The part taken by each of these distinguished statesmen, in a measure of the highest practical utility, such as has commanded the attention of every nation at all advanced in political economy, is entitled to a place in history.

The writer next speaks of the gradual increase of the survey under Mr. Hassler without comment; but he makes the gradual increase under Mr. Bache, the present Superintendent, as we shall see hereafter, an occasion for remark. It is no part of our design to undervalue the labors of Mr. Hassler; but the writer, in order to disparage Mr. Bache, has given him credit such as Mr. Hassler himself did not claim. The main triangulation, at the time of Mr. Hassler's death, was only regarded by him as extending from the base line on Fire Island beach to below Philadelphia, and not, as is stated, to Point Judith. The triangulation from near New York to Point Judith, executed by Mr. Blunt, one of the principal assistants, was considered by Mr. Hassler only as a secondary triangulation, and was adopted as a main triangulation by Mr. Bache himself, after the measurement of a base of verification in Rhode Island.

The writer asserts, that, "four sheets of the large maps of New York Bay and harbor were finished, and the reduced sheets of New York Bay and Long Island Sound were ready for the engraver, as well as the whole of Delaware Bay," during the period of Mr. Hassler's superintendence."

One sheet only of the four was finished by Mr. Hassler. The others had not been commenced, but were delayed after Mr. Hassler's death, by the necessity for making important additions to the hydrography, which occupied a considerable working season. The reduced sheets of Long Island Sound were not, as the writer hypothetically assumes, ready for the engraver. The project for the publication of Delaware Bay, the reduction of the whole land work, and a part of the hydrographical work, were made under the present Superintendent. Very extensive and important additions have been made to the hydrography of Long Island Sound, and some additions to the hydrography of Delaware Bay.

The name of the present Superintendent does not, as the writer thinks, occur in the title of the New York chart, but is merely placed in connection with the work actually executed under his direction, and for which he is therefore responsible.

It is not correct, as is said by the writer, that the soundings had been carried far enough to sea for the purpose of navigation, in 1843. The weights and measures intended for the custom-houses had *not*, as he *imagines*, been completed; and as to the hope of procuring copies of the English standards not being realized, as he says, the writer discovers a want of *perfect* familiarity with the subject, in not knowing that the British standards have not yet been made. The *equipment* of the naval parties is paid chiefly from the *Coast Survey* appropriation, and not from that of the *Navy*, as the writer assumes.

The statements of the writer concerning the transfer of some of the revenue steam vessels to the Coast Survey are also theoretical. Captain Alex. V. Frazer, late Chief of the Bureau of the Revenue Marine, in his *annual report* for 1847, recommended the abandonment of the use of steam in that branch of the public service, estimating the saving to be thereby effected at between three and four hundred thousand dollars. One of these vessels having been put up for sale in New Orleans, the single bid of three thousand dollars was made for her. She cost one hundred and twenty thousand dollars. After this vain attempt to dispose of these vessels, Capt. Frazer recommended in the same *annual report*, that, in order to prevent this melancholy sacrifice of public property, they should be transferred to the Navy, the Coast Survey, and the light-house service. Yet, the writer supposes "that this transfer was made without a passing remark."

The assertion that "as much work was done every year (during Mr. Hassler's superintendence) as there has been done since," taken in connection with a subsequent declaration, that the appropriation has been since increased, and the number of vessels, assistants, and officers, greatly augmented, is a direct charge that all the officers and vessels are idle; that the gentlemen of the army and navy, and the civil assistants employed on the Survey are in collusion with the Superintendent to deceive the government and the country. We trust it will not be thought unamiable in us to plead not guilty to this grave accusation, relying for proof on the table of statistics, which shows that much more work has been done in the last five years, than in the preceding ten years.

The statements made by the writer, in relation to the monthly reports, indicate, on this subject, also, a hypothetical delusion. They were, formerly, of no value, being merely put on file by a clerk of the Treasury Department, and regarded as inventories. Now these reports, sent to the Superintendent, who directs the progress of the work, furnish the means by which the operations of detached parties can be duly combined, the monthly progress of the work estimated, and the influences of climate, season, and local peculiarities, allowed for in every part of the Survey.

The monthly reports of results are not changed in their character. Monthly journals have been superadded of great value in combining the operations of different parties, and in showing the amount of working time which may be counted on in different localities, and for different operations. These monthly journals do not contain a single one of the particulars mentioned by the writer as to be obtained from them at the end of the year, but they do furnish the data for determining the conditions of the atmosphere, and other difficulties which obstruct the work in particular sections, and which the writer states were not taken into consideration; and they have, contrary to his *supposition*, been used for such purpose by the Superintendent in his annual reports, which contain full references to health, climate, and character of season.

The writer speaks of the permission to employ private computers as a *se-*
t abuse.

The permission here alluded to was given in the "directions" of the year, approved by the Secretary of the Treasury, and printed and circulated; and names of persons thus employed are mentioned in the annual report of the Superintendent. This "official patronage" consists in the employment of computers, chosen by the authority of the Department from among men distinguished for their mathematical attainments, and has never amounted to more than \$1,500 in any one year. The plan, so far from being censurable, ~~me~~ which merits, and has received, high approval. It enables the Coast Survey to command the best mathematical talent of the country at comparatively a moderate compensation, and insures an accuracy which could hardly be otherwise attained.

The statement that a new bureau of accounts has been made of the Coast Survey office is quite a mistake, though certainly not meant unkindly. The ~~st~~ Auditor of the Treasury has always audited, and now audits, the ~~st~~ Survey accounts. The administrative examination of them by the Superintendent is similar to that made by the Chiefs of the Corps of Engineers, and of Topographical Engineers, and is an additional guaranty to that ~~merly~~ existing.

The statement that but one-eighth of the coast of the United States has been surveyed, and that parties are engaged in, and have been sent to, either Mexico or California, is not altogether consistent with the real facts, at least ~~ce~~ that extent having been surveyed, and the despatch of any party whatever to Mexico or California never having been either made, or contemplated. The writer believes that the salary of the present Superintendent is greater than that of his predecessor, and cites as his proof a mistake in the blue book of 1846, corrected in that of 1847, (it is only published once in two years,) which correction, of course, the writer never saw.

But in truth, (we do not mean to be sarcastic in the use of this word,) the annual compensation originally made to Mr. Hassler has been continued to the present day. From 1832 to 1836, there existed some difficulty about the allowance of fifteen hundred dollars of this sum. But the terms of the appropriation bill of 1836 were construed to authorize the payment of the sum held back, and it was given to Mr. Hassler.

His compensation to the close of his life was \$6,000 per annum. The same rate has been continued, dollar for dollar, to the present Superintendent. Of course, the writer has never had any means of informing himself of the facts. They appear, however, to be worth mentioning, if it be only for his own satisfaction.

And here we can, we believe, safely dismiss the writer. We do so with the utmost good nature; after his kind, and according to his very humble abilities, he has given us some help, and we thank him for it. "Truly, sir, 'tis better for my foes," is the remark of the clown; and we begin to see that it has other applications than the particular one made by himself. To be sure, such service cost no trouble, "'tis as easy as lying;" and, moreover, ~~me~~ the demerit of not being voluntary; but still, we are thankful for it, and we should be sorry to think that, by exposing the theoretical fancies and slight inaccuracies of fact into which the writer has been misled, we had done anything to injure his reputation. We feel confident, indeed, that such injury can follow.

And what is the service which this writer has rendered to the Coast Sur-

vey ! The good he has done, is to promote inquiry into the real condition and progress of the work, to make known its numerous friends, to elicit laudatory commendations of its principles and practice, and to spread abroad the knowledge of its usefulness and honor.

There is now a more confident assurance than ever, that its prosperity depends, not upon any fickle caprices of public favor, but upon an enlightened general opinion ; that whilst it is conducted as at present, it will never want judges and advocates, able and willing to give it an efficient, steady, and intelligent encouragement and support. And for the good of the country, for the sake of true knowledge, for the cause of humanity, we rejoice that it is so.

"Grateful science" records with satisfaction the many years and many instances of honorable patronage which she has received from the Congress and government of the United States, never more conspicuous and beneficial than when conferred upon the Coast Survey. It is true she has suffered, in common with whatsoever is of good report, from the assaults of ignorance, prejudice, and self-interest. Like the benighted lady, she may have to encounter a thousand fantasies, and wily trains of evil, or be compelled, as now, to unlock her lips in the unhallowed air, to answer some juggler, "obtruding false rules pranked in reason's garb." But if she be faithful to herself, she has nothing to fear from these threatened dangers, because she ever walks attended by the strong-siding champion, Truth.

Whatever false enchanter endeavors to fetter her onward progress, will find his rod reversed, and his wand snatched from his grasp.

While she preserves her purity, she

"May be assailed, but never hurt ;
Surprised by unjust force, but not enthralled ;
Yes ! even that, which mischief meant most harm,
Shall in the happy trial prove most glory."

MERCANTILE LAW CASES.

POINTS IN MERCANTILE LAW.*

FROM IV. DENIO'S SUPREME COURT REPORTS.

This is another volume of Mr. Denio's series of Reports of Cases in the old Supreme Court of New York, which was abolished by the Constitution of 1846, but the powers of which, for the purpose of hearing and deciding pending cases, were continued until July, 1848. The fame of that tribunal, and the character and authority of its decisions, no change nor reform can do away. Mr. Denio is bringing to a close this noble series of Reports in a manner worthy of the distinguished reporters whose labors have contributed so much to the cause of sound law learning in the State and country.

There are many cases in this volume involving interesting points of mercantile law.

Insurance upon Freight. In *Gordon vs. The American Insurance Company*, (p. 360.) the plaintiffs were insured upon the freight of all kinds of goods, laden or to be laden, on board their ship, during a voyage from Canton to New York, "the adventure beginning," in the language of the policy, "from and immediately following the loading thereof on board of the vessel." The ship was lost before taking any cargo on board.

* Reports of Cases argued and determined in the Supreme Court and in the Court for the Correction of Errors, of the State of New York. By HIRAM DENIO, Counsellor at Law. Vol. IV. New York: Banks, Gould, & Co. 1848.

In giving the opinion of the Court, Chief Justice Bronson stated that there is no particular form of policy of insurance on freight in use in England, and in some of the American States. A brief memorandum only is inserted on the margin of the common policy on ship or cargo. In construing such policies, the Courts have held that the insured acquired no interest in the freight on which the policy attaches until the cargo is on board, unless the freight insured is on a charter party for a voyage, in the course of which cargo is to be taken on board, in which case the risk begins with the beginning of the voyage.

But in the case before the Court, the parties had departed from the usual form, and had explicitly fixed the time when the risk or adventure was to begin; and it was held that the ship, having been lost before that time arrived, the insured could not recover.

Guaranty. The much vexed subject of undertakings for the debts of third parties, under the Statute of Frauds, which has been a favorite bone of contention from the time of *Wain vs. Walters*, in England, and *Packard vs. Richardson*, in Massachusetts, but which the Revised Statutes of New York were supposed to have put at rest, is again mooted in *Staats vs. Howlett*, (p. 559.) The Statute of Frauds requires all guaranties or undertakings to pay the debts of others to be in writing. The original controversy was, as to whether the consideration of such undertaking must be expressed in writing. In England it is held that the consideration must be expressed, or, at least, appear; in Massachusetts it is held sufficient, if the promise is in writing. The Revised Statutes of New York require, in so many words, that the "agreement, or some note or memorandum thereof, expressing the consideration, be in writing." (2 R. S., 135.) But this provision, instead of settling, seems to have only had the effect of shifting the ground of the controversy, the debate in the present case being, not, as hitherto, as to whether an agreement can be considered as expressed or stated when the consideration is not stated, but as to what constitutes a sufficient "expression of a consideration." Here the defendant wrote to the plaintiff: "I hereby obligate myself to hold you harmless for any endorsement you may make for, or have made for, the late firm of Peck, Howlett, and Foster, not exceeding \$3,000." Mr. Justice Jewett thought that here the consideration was not sufficiently expressed to satisfy the English rule, or the New York statute. The majority of the Court held, in the language of Justice Beardsley, that this agreement was "a full compliance with this requisition of the statute, and the promise is binding upon the defendant." Chief Justice Bronson said the language used was fully equivalent to saying "if you will endorse, I obligate myself to hold you harmless." As to past endorsements, however, it was admitted that the agreement was not sufficient to bind the defendant.

Bills of Lading. The case of *Covill vs. Hill* decides several points of interest to factors and shippers, or rather to those engaged in canal transportation. The plaintiff contracted with one Potter to sell him some timber, which Potter, as the agent, and in the name of the plaintiff, was to ship to the defendants at Albany, and which the defendants were to be directed to sell as the property of the plaintiff. On the shipment, the captain of the canal boat delivered to the plaintiff the following bill of lading: "Received of A. F. Potter, for Miles Coville, 52,900 feet of boards and plank, in good order, to be delivered to Messrs. Hill & Sanford, Albany. Also, one hundred dollars on freight, July 2, 1842. (Signed) H. Banks."

The son and agent of Potter also made out and delivered to the captain the following writing: "Elmira, July 2, 1842. Shipped on boat Occidental, H. Banks, captain, 52,900 feet white pine boards and plank for Albany. (Signed) A. F. Potter." This writing and the lumber were delivered to the defendants, who hereupon made advances upon it to Potter as his consignment. The defendants contended that the writing signed by Potter was a bill of lading, and therefore, that the goods were shipped in his name, and that the case thus came within a statute passed in 1830, to which we shall presently advert. Chief Justice Bronson said that, although "contracts for the freighting of goods on our canals are usually less full and formal than when the property is to be carried by sea," yet they must have all the essential qualities, or else they cannot have the effect of

bills of lading." This writing was not a bill of lading. "A bill of lading is the written evidence of a contract for the carriage and delivery of goods sent by water, for a certain freight. (1 H. Black. 359.) It is signed by the captain or master of the ship or vessel, and states, among other things, by whom the goods are shipped, and where and to whom they are to be delivered." The only bill of lading in this case was the document delivered to the plaintiff.

Lien of Consignees. This case also contains an important comment upon the statute of 1830, (p. 203,) relative to principals and factors, which enacts that "every person in whose name any merchandise shall be shipped, shall be deemed the true owner thereof, so far as to entitle the consignee of such merchandise to a lien thereon" in certain cases. The Court held that the broad language of the statute, which, if strictly construed, would give a lien to the consignees of goods shipped by any wrong-doer, a trespasser or a thief, must be confined to cases "where the goods have been shipped by the owner, or under his authority, in the name of another." The act is a careless imitation of an English statute, (6 Geo. IV., c. 94,) which is confined, in express terms, to cases where the goods have been "entrusted for the purpose of consignment, or of sale," to the shipper.

Promissory Notes. An agreement to pay \$250, with interest, "out of the nett proceeds, after paying the costs and expenses of ore to be raised and sold from the bed on the lot this day conveyed by Edward Madden to Edwin Dodge, which bed is to be opened and the ore disposed of as soon as conveniently may be," is held, in *Worden vs. Dodge*, (p. 159,) not to be a promissory note. "A promissory note," say the Court, "must be payable absolutely, and not upon any contingency as to time or event." Here the money was to be paid "out of the nett proceeds" of ore to be raised and sold, and there was the contingency that the fund might turn out to be inadequate.

We might go on, were there space, and fill pages with points of mercantile law from this valuable volume—points of importance, and which should be of interest to the mercantile reader. But we must content ourselves with indicating some of the other topics discussed, among which are cases involving the subject of Partnership, of Banks, the Lien of Common Carriers, Chattel Mortgages, Sales, the Law of Shipping, and Usury.

We understand that this volume closes the series of Denio's Reports, and that this, therefore, is the last of the old Supreme Court Reports. We cannot take leave of it without a feeling of something like regret; for, while we have every confidence that, under the new order of things, with judges of equal ability, and for the most part with the same judges who have heretofore presided in the tribunals of the State, the value of their decisions will remain undiminished, we still feel convinced that we shall never look upon a series of Reports superior to those which bear the names of Johnson and Cowen, Wendell and Denio.

MARINE INSURANCE.

WHAT CANNOT BE INSURED.

In time of war no valid insurance can be effected upon the property of an enemy, although such property consists of goods manufactured in our country; neither can a citizen insure goods purchased by him in an enemy's country. (*Bristow vs. Towers*, 6 T. R. 35; 8 T. R. 548.)

The Wages of Seamen cannot be Insured. This rule, however, does not apply to wages already earned. (*Hughes on Ins.* 18.) Neither does it apply to the captain's wages, which may be insured, as also his commissions and privileges on board the vessel. (*King vs. Glover*, 5 B. and P. 206.) Where, by the laws of the land, the traffic in any article is prohibited, no insurance can be effected on such article. The general rule is, that an insurance cannot be made in contravention of the laws of the land. (*Hughes on Ins.* 20.) And the insurer may take advantage of this objection, though he knew, at the time the insurance was effected, that the voyage was illegal. (1 *Marshall on Ins.* 48, 49.)

The Property usually Insured. Insurances are most commonly made on goods and merchandise, freight, bottomry loans, profits, and commissions. Every species of property, in fact, may become the subject of insurance, unless, from motives of public policy, it has been prohibited by law.

A person cannot insure unless he has an interest in the Property Insured. The law is well settled in this country, that if a man insures property in which he has no interest, the insurance is void although it is expressed in the policy, "interest or no interest." These policies are called wager policies, and are regarded by law as a species of gambling, and are therefore void. (*Amory vs. Gilman*, 2 Mass. 1; *N. Y. Revised Stat.* 662, § 8, 9, 10; 1 *Rawle*, 107; 2 *Verm.* 144.)

It is not necessary, however, that a person should be the owner of the whole, or a part of the property, in order to enable him to effect an insurance thereon; it is sufficient, if he is directly interested in its safety. A person, therefore, has an insurable interest in any property, when he is so circumstanced with respect to it, that its loss will be prejudicial to him. (*Lucena vs. Crawford*, 5 B. & P. 302.)

INSURANCE UPON FREIGHT.

In order to recover on a freight policy, the insured must establish, either that goods were put on board the vessel, or that there was some contract under which the ship-owners, if the voyage had been consummated, would have been entitled to demand freight.

It is not always necessary, however, that the cargo should be actually on board, in order to enable a ship-owner, upon the loss of the vessel, to recover the insurance of freight; it is sufficient, if it is so engaged as to give the ship-owner the right to have it. (*McGaw vs. Ocean Ins. Co.* 23 *Pick.* 405.)

But it is necessary that the insured should have either already received the goods on board, or sailed in the performance of a contract to carry goods. (*Riley vs. Hartford Ins. Co.* 2 *Conn.* 368.) If, therefore, the owner of a ship, upon the eve of sending her to a foreign port for the purpose of obtaining freight, (no cargo, however, having been contracted for, but the ship being merely a seeking ship,) should procure an insurance on the freight expected to be earned, and the vessel should be lost on her passage out, and before any contract for freight had been entered into—the owner could not recover such insurance.

And where, on a valued policy, made with reference to the whole amount of freight, a complete cargo is not in fact obtained, but the ship is only partly loaded when lost, the insured can only recover for the loss of the freight on the goods actually loaded on board the vessel. (*Hughes on Ins.* 45.)

OTHER INSURABLE INTERESTS.

The profit expected to arise from a cargo of goods may be insured. Profits ought always to be insured in a *valued* policy, as they are then recoverable in case of a loss of the cargo, without the insured's being compelled to show that any profits would have been made if the loss had not happened. (*Petapasco Ins. Co. vs. Coulter*, 3 *Pet.* 222.)

The advances of a consignee, an agent or factor, and the commissions of a master or supercargo, are all subjects of insurance. So, a merchant has an insurable interest in the expected commissions upon goods on ship-board, in the progress of the voyage, which are consigned to him for sale. (*Putnam vs. Mercantile Ins. Co.* 5 *Metc.* 386.)

Both mortgagor and mortgagee may severally insure their respective interests. And though the property is mortgaged to its full value, yet the mortgagor has an insurable interest in the whole. (*Traders' Ins. Co. vs. Roberts*, 9 *Wendell* 404; 3 *Pick.* 258.)

The lender upon bottomry and respondentia bonds has an insurable interest for the sum lent. The owner of the ship, in such case, has only an insurable interest in the surplus value above the sum lent. (1 *Marsh. on Ins.* 115.)

It is sufficient if the insured has only a special property in the thing insured. As, a part owner of a vessel, who has chartered the remainder with a covenant to

pay the value in case of a loss, may insure the whole vessel as his property. But a part owner insuring in his own name only, and not mentioning any other person as being interested, can recover only the value of his own interest. (*Oliver vs. Green*, 3 Mass. 133; 1 Met. 16.) The insured usually caused the policy to be made for "himself and whom it may concern," in which case it is for the benefit of any person who has an interest in the property at the time of the insurance, and who *authorized* the insurance to be effected, or *adopted* it when made. (3 Kent, 372.)

A person who charters a vessel and contracts with the owner to make insurance, has a sufficient insurable interest, as the effect of the contract is the same as an agreement to pay in case of loss. In such case, it is not necessary for the insured to state to the underwriters the particular nature of his interest, unless they question him respecting it. (*Bartlett vs. Walter*, 13 Mass. 267.) And where it is stipulated by a charter party, that in case the ship be lost during the voyage, the charterer shall pay the owner a sum of money which is estimated as the value of the ship, the owner has still an insurable interest.

WHEN CONSIGNEE, OR FACTOR, IS BOUND TO INSURE.

It seems now to be well established, that consignees for sale, such as commission merchants, &c., may insure both for themselves and for their principal or consignor; and they may insure the goods in their own name or in the name of their principal. If they insure in their own name, and the goods are lost, they may recover the full value of the goods, in which case the surplus, beyond their own interest, would belong to their principal. (*De Forest vs. The Fulton Ins. Co.* 1 Hall 84.)

Commission merchants are not, however, bound to insure, for the benefit of their principal, goods consigned to them for sale, without some express or implied directions to that effect. (*Brisban vs. Boyd*, 4 Paige, 117.)

The instances in which an order to insure must be obeyed are, first, where a merchant abroad has effects in the hands of his correspondent here, in which case he has a right to expect that he will obey an order to insure, because he is entitled to call his money out of the other's hands when and in what manner he pleases; secondly, where the merchant abroad has no effects in the hands of his correspondent, yet, if the course of dealing between them be such, that the one has been used to send orders for insurance, and the other to comply with them, the former has a right to expect that his orders for insurance will still be obeyed, unless the latter give him notice to discontinue that course of dealing; thirdly, if the merchant abroad send bills of lading to his correspondent here, he may insert on them an order to insure, as the implied condition on which the bills of lading shall be accepted, which the other must obey, if he accept them, for it is one entire transaction. (*Smith vs. Lascelles*, 2 T. R. 187.)

And if the usage of trade, or the habits of dealing between them and their principals, require them to insure, they are bound to do so, even if they have received no express directions.

In the above cases the agent or consignee must exercise due diligence and skill in procuring insurance, and must cause the usual and ordinary risks to be inserted in the policy. If in any of these cases he neglects to make insurance, he is himself, by the custom of merchants, to be considered as the insurer, and liable as such in the event of a loss. And if no available insurance is effected, it is the same as if none at all were made. (*Paley on Agency*, 16, 18.)

It has been held that, although no advantage can be taken of a gratuitous promise to procure insurance, in case of a total neglect to do so; yet that, if a voluntary agent actually proceeds to make insurance, but through his gross mismanagement the benefit of it is lost, he is answerable for the injury sustained. (*Paley on Agency*, 16, 18.)

COMMERCIAL CHRONICLE AND REVIEW.

TRADE COMPARED—IMPORTS AND DUTIES AT THE PORT OF NEW YORK—EFFECT OF A STEADY
 DROPT—EXPORTS OF PLAIN COTTONS AND CALICOES FROM GREAT BRITAIN—HER LARGE EXPORT
 7—COTTON TAKEN BY UNITED STATES MANUFACTURERS FOR CONSUMPTION—PRICES OF COTTON
 COTTON MARKETS—DUTIES AND SPECIE IN THE SUB-TREASURY AT NEW YORK—PAYMENTS TO
 0—DISPOSITION IN EUROPE TO INVEST IN UNITED STATES STOCK—PRICES OF UNITED STATES,
 ORE, OHIO, AND KENTUCKY STOCKS—RATES OF EXCHANGE IN NEW YORK—BEARING OF COM-
 AL LEGISLATION IN ENGLAND ON THE AFFAIRS OF UNITED STATES—BRITISH NAVIGATION LAWS
 BANCROFT'S PROPOSITION TO THE BRITISH GOVERNMENT—WEBSTER'S RESOLUTION OF IN-
 , ETC., ETC.

Spring business has made reasonable progress thus far, and although prices
 in Atlantic cities are in general somewhat higher than those current at
 the close of the fall trade, yet the importations do not apparently reach so high a
 level as for the corresponding season last year. This may probably arise from
 altered circumstances of the trade of Europe, which last year was suffering in
 part from the effects of severe revulsion, followed by the panic generated by
 several revolutions on the continent. These circumstances conspire as well to
 diminish production as to diminish stocks of goods, by the quantities sent here to real-
 ize on any terms. The importations at the port of New York generally
 amount to about two-thirds of the receipts for the whole Union; if we, therefore,
 make a comparative table of importations and duties from January 1 to the close
 of the first week in March, we have a guide to the state of business generally:—

IMPORTS AND DUTIES AT THE PORT OF NEW YORK.

	Specie.	Free goods.	Dutiable.	Total.	Duties.
January 1 to	\$57,700	\$525,534	\$7,833,710	\$8,416,944	\$1,911,465
March 9.....	21,323	285,117	8,257,786	8,564,226	2,070,447
March 1 to 9.....	7,974	266,191	2,111,576	3,385,741	584,313
January 1 to					
March 9.....	\$86,997	\$1,076,842	\$18,208,072	\$20,366,911	\$4,566,225
March 1 to 9.....	107,366	1,286,750	20,476,081	21,819,487	5,054,366

The return indicates a reduction of dutiable goods of some 10 per cent, and a
 corresponding reduction in the federal revenues. The diminished importation is
 due almost altogether to the improved state of the markets abroad for goods,
 enabling them to be sent here at anything like the terms on which they were
 sent last year. While this supply of foreign fabrics is curtailed, the demand for
 goods at improved prices is active in the Atlantic cities, and is manifest in the
 increased purchases of raw materials at improving prices by the manufacturers.
 The recovery of confidence in Europe prevents the great sacrifice of goods this year,
 so rapidly dissipated the manufacturing capital of Europe last year; and it is
 only owing to the steadiness of the United States currency that larger quantities
 of foreign goods at higher prices were not forced off in the United States markets.
 After how great soever was the anxiety of continental and English manu-
 facturers and storekeepers to realize upon goods, they were compelled, if they
 came here, to submit to specie prices in a healthy market. Certain it is, that
 the extended auction and credit machinery, which in former years created aver-
 sage vast quantities of goods into the most remote towns of the Union, been
 withdrawn, the foreign manufacturer could to a far greater extent have sold

goods at better prices, and obtained larger sums of money for remittance to straightened markets abroad. We find in the diminished imports this year the sure and certain effect of a steady currency in the United States. It forbade high prices when goods were forced upon the market; and when the pressure is removed abroad, and the necessity for submitting to low prices no longer exists, the amount of imports declines. The export of cottons from England for a series of years indicates the state of affairs in that country:—

EXPORTS OF PLAIN COTTONS AND CALICOES FROM GREAT BRITAIN.

	Plain, to U. States.	Total.	Printed and dyed. To U. States.	Total.	Total to U. States.	Grand total
1844	9,661,820	569,877,792	12,008,635	313,111,455	21,670,455	882,769,971
1845	12,412,981	613,138,645	13,097,851	310,880,697	25,510,832	923,999,343
1846	10,640,215	618,839,181	13,556,509	287,084,797	24,196,724	835,923,976
1847	41,519,244	488,044,682	44,425,017	287,384,903	85,944,261	775,429,865
1848	16,968,637	556,199,538	39,600,996	301,515,780	56,569,633	867,715,311

A very considerable decline in the exports to this country is manifest for the year 1848. In the year 1847, the combined effect of the revulsion in England, causing an extraordinary tight money market, together with the remission of duties in the United States, produced the large export to this country, resulting in low prices here. A reaction is now apparent. The home market of England is reviving, and the steadiness of the United States currency prevents the realization of large profits, by reason of lower duties. It is also to be remarked, that the United States manufacturers have taken an annually increasing quantity of cotton in the period here indicated. The following table shows the number of bales taken by United States manufacturers from the quantity delivered on the seaboard:—

BALES OF COTTON TAKEN BY UNITED STATES MANUFACTURERS ANNUALLY.

	1846.	1846.	1847.	1848.	1849.
1st six months.....	275,296	314,313	235,956	248,812	307,363
2d "	113,710	108,284	192,011	282,960	.....
Total for the year..	389,006	422,597	427,967	531,772	.....

The state of the markets and prices have generally operated to induce larger purchases by the manufacturers at one season of the year rather than at another. In this respect corporate companies, with large command of means, have a great advantage over the individual manufacturer. The fluctuations are indicated by the following prices in New York:—

PRICES OF COTTON IN NEW YORK.

	Sept., 1847.	March, 1848.	Sept., 1848.	March, 1849.
Inferior.....	.....	.....	5½ a 5½	.....
Ordinary to good ordinary..	11 a 11½	7 a 7½	5½ a 6½	6½ a 6½
Middling to good middling..	11½ a 12½	7½ a 8½	6½ a 6½	7 a 7½
Middling fair to fair.....	12½ a 13½	8½ a 8½	6½ a 7½	7½ a 8
Fully fair to good fair.....	13½ a 14½	8½ a 9½	7½ a 8½	8½ a 9

It will be observed, that in the course of the first six months of the cotton year 1848, viz, from September 1, 1847, to March, 1848, cotton fell 30 per cent in price; and the result was, that the largest portion of the purchases of the manufacturers in that year was made in the second six months; an unusual circumstance, because cotton is generally lower in the first six months, when it is pressing upon the markets. Last summer, under the adverse state of affairs abroad, cotton reached a very low point, and the purchases of the manufacturers have been consequently

large. It will be observed, that while, in the current year 1847, the import of cotton goods from England alone increased 50,000,000 yards, equal to 40,000 bales of cotton, the purchases of the United States manufacturers for the cotton year 1847 increased 5,400 bales; and against an importation in 1848 of 32,000,000 yards, equal to 26,000 bales increase over 1846, the manufacturers took 109,175 bales more, showing an increased consumption in the United States of 135,000 bales of cotton, and prices of both raw material and fabrics are now rising, under a still larger production of cloths. These facts afford strong evidence of great general prosperity, accompanied as they are by improved rates for wool and other raw produce, as well as by enhanced revenues in all the channels of trade.

That money, in such a state of affairs, is dear, and not easily borrowed, is a natural consequence of the desire of all business men to employ all the capital they can command in preparations for an anticipated large and lucrative business. In the United States, the number of retired capitalists, merchants with surplus capital, and landed proprietors of large revenues, all of whose incomes in the wealthy cities of Europe form a fund from which the money market draws constant supplies, is very limited; and when convulsions of general prosperity stimulate the enterprise of all active men, there remains but little active capital seeking investment. This is nearly the state of affairs now; and in those localities where the largest amounts of floating capital have been turned into fixed investments, as is the case with the railroads of New England, the pressure is the greatest; and probably the Boston money market has been more stringent than either of the other Atlantic cities.

The revenues of the federal government have been less than last year, under the diminished importations; but in consequence of the reduced expenditure, by cessation of war, they have exceeded the outlay, causing specie to accumulate in the Treasury, and permitting the Secretary to postpone the payment of the remaining instalments, amounting to \$4,700,000, due on the loan of 1848. The monthly duties in the port of New York, and specie in the Treasury, at the close of each four weeks, has been as follows:—

	Aug. 22.	Sept. 25.	Oct. 23.	Nov. 27.	Dec. 25.	Jan. 22.	Feb. 27.
Duties	2,532,273	2,119,571	1,328,833	1,112,549	806,630	1,911,465	2,070,447
Specie in New York Treasury...	563,382	1,433,387	855,330	1,676,662	1,184,931	1,277,303	1,693,799
" elsewhere	1,448,946	2,015,426	2,480,315	2,745,864	3,191,301	2,935,488	3,876,444
Total in U. States Treasury ..	2,013,902	3,448,813	3,335,645	4,429,526	4,316,132	4,212,791	5,570,231

The amount due Mexico for the annual instalment, under the treaty, is \$3,700,000, payable in July; and it was arranged with the House of Baring Brothers to pay them \$1,000,000 in New York, on condition that they pay it in Mexico when due, an operation which, in the first week of March, drew \$1,000,000 in coin from the assistant treasury and placed it with the banks; and it is understood that the remainder of the instalment, \$2,700,000, was closed by means of the stock to be issued by the United States, and the call of which was delayed until April 1st. These transactions facilitate the settlement of the Mexican claim, and the final subscriptions to the last war loan, without the mediation of specie.

The state of the exchanges between Europe and the United States, which has enabled the operation to be carried out, is indicative as well of the migration of capital to the United States, through the medium of stock investments, as the prosperous condition of our external commerce. The disposition to invest in United

States, now so prominent in Europe, has again caused United States stocks to be in demand, and at a considerable premium. The continent of Europe continuing in the same turmoil, it is not to be wondered at that the French, Germans, and Italians are only too anxious to send their money in the first place to London, and when once there, to direct the investment of it in any good sound stock; such as consols, or United States federal 6 per cents. The former will pay, at present prices, $3\frac{1}{2}$ per cent; the latter $5\frac{1}{2}$ per cent; and the calculation of the foreigner is, that if he keeps his United States 6 per cents five years, and then sell them out, he can stand a loss of 10 per cent and still do as well as if he had put his money in consols; but should there not be such a fall, he will get a better income by just so much. The advance in consols, at the same time that a greater degree of confidence in the stability of the French government has been acquired, has apparently induced holders of consols to sell out for investment in French stock, while the sellers of these latter seek United States descriptions. The advance in American stocks of all kinds has been general in London, and has caused a considerable amount to be sent forward for sale, although prices here have kept pace with the rise. The following are the prices of some of the leading descriptions:—

PRICES OF STOCK IN NEW YORK.

	United States.						New York	Ohio	Ky
	5 th , 1853.	6 th , 1856.	6 th , 1862.	6 th , 1867.	6 th , 1868.	6 th , 1869.			
Oct. 1848 . . .	93 $\frac{1}{2}$ a 93 $\frac{1}{2}$	103 a 103 $\frac{1}{2}$	103 $\frac{1}{2}$ a 103 $\frac{1}{2}$	104 $\frac{1}{2}$ a 105	105 a 105 $\frac{1}{2}$	105 a 105 $\frac{1}{2}$	105 a 105 $\frac{1}{2}$	100	94
January 22 . .	99 a 99 $\frac{1}{2}$	105 a 105 $\frac{1}{2}$	107 a 107 $\frac{1}{2}$	109 a 109 $\frac{1}{2}$	109 $\frac{1}{2}$ a 109 $\frac{1}{2}$	109 a 109 $\frac{1}{2}$	108 a 109	103	94
February 19 .	96 a 98 $\frac{1}{2}$	105 a 105 $\frac{1}{2}$	107 a 107 $\frac{1}{2}$	110 $\frac{1}{2}$ a 110 $\frac{1}{2}$	111 $\frac{1}{2}$ a 111 $\frac{1}{2}$	111 $\frac{1}{2}$ a 111 $\frac{1}{2}$	108 a 109	103 $\frac{1}{2}$	94 $\frac{1}{2}$
" 28 . . .	99 $\frac{1}{2}$ a . .	106 a 107	109 $\frac{1}{2}$ a 110	111 $\frac{1}{2}$ a 112	112 $\frac{1}{2}$ a 113	112 $\frac{1}{2}$ a 113	108 $\frac{1}{2}$ a 109 $\frac{1}{2}$	103 $\frac{1}{2}$	94
March 12 . . .	99 a 99 $\frac{1}{2}$	104 a 105	107 a 109	110 a 111	112 a 112 $\frac{1}{2}$	112 a 112 $\frac{1}{2}$	108 a 109	103 $\frac{1}{2}$	94

The first week in March is, in New York, usually a month of heavy payments, consequent upon the maturity of considerable amounts of fall paper, and this circumstance aided in the pressure manifest in prices. Exchanges have doubtless been affected by the remittances of stock, and the rates have continued to fall, as indicated in the following quotations:—

RATES OF EXCHANGE IN NEW YORK.

	Sterling.	Paris, 60 days.	Amsterdam.	Hamburg.	Bremen.
December 1	8 $\frac{1}{2}$ a 8 $\frac{1}{2}$	5.27 $\frac{1}{2}$ a 5.25	40 $\frac{1}{2}$ a 40 $\frac{1}{2}$	35 $\frac{1}{2}$ a 35 $\frac{1}{2}$	78 $\frac{1}{2}$ a 78 $\frac{1}{2}$
" 15	8 $\frac{1}{2}$ a 9	5.30 a 5.25	40 $\frac{1}{2}$ a 40 $\frac{1}{2}$	35 $\frac{1}{2}$ a 35 $\frac{1}{2}$	78 $\frac{1}{2}$ a . .
January 1	8 $\frac{1}{2}$ a 9	5.27 $\frac{1}{2}$ a	40 $\frac{1}{2}$ a 40 $\frac{1}{2}$	35 $\frac{1}{2}$ a 35 $\frac{1}{2}$	78 $\frac{1}{2}$ a 78 $\frac{1}{2}$
" 15	8 $\frac{1}{2}$ a 9	5.30 a 5.25	40 $\frac{1}{2}$ a 40 $\frac{1}{2}$	35 $\frac{1}{2}$ a 35 $\frac{1}{2}$	78 $\frac{1}{2}$ a 78 $\frac{1}{2}$
February 1	8 $\frac{1}{2}$ a 8 $\frac{1}{2}$	5.32 $\frac{1}{2}$ a 5.25	40 $\frac{1}{2}$ a 40 $\frac{1}{2}$	35 $\frac{1}{2}$ a 35 $\frac{1}{2}$	. . a 78 $\frac{1}{2}$
" 15	8 a 8 $\frac{1}{2}$	5.31 $\frac{1}{2}$ a 5.27 $\frac{1}{2}$	40 $\frac{1}{2}$ a 40 $\frac{1}{2}$	35 a 35 $\frac{1}{2}$	78 $\frac{1}{2}$ a 78 $\frac{1}{2}$
March 1	7 a 8	5.32 $\frac{1}{2}$ a 5.30	40 a 40 $\frac{1}{2}$	34 $\frac{1}{2}$ a 35	77 $\frac{1}{2}$ a 78 $\frac{1}{2}$
" 15	6 $\frac{1}{2}$ a 7	5.37 $\frac{1}{2}$ a 5.32	39 $\frac{1}{2}$ a 39 $\frac{1}{2}$	34 $\frac{1}{2}$ a 34 $\frac{1}{2}$	77 $\frac{1}{2}$ a 78

The rates have declined rapidly, and the supply even of first-class bills upon the market has been very considerable, tending to reproduce an ease in the money market.

The rapid progress of commercial affairs in England, in respect of legislation, has an important bearing upon the trade of the United States, present and prospective. When the American colonies separated from the home government, the James' navigation act of England was in full force, and became operative first when the United States became a nation. The fact that they did become operative necessitated their modification in favor of the United States vessels, and a treaty permitted them to visit England on the same terms that English vessels were permitted to visit the United States. During the long wars with Europe they continued in operation in respect to European commerce, which did not exist. On

return of peace it became necessary to modify them in respect to all nations had ships, and England entered into treaties successively with all the nations of Europe, against the remonstrances of her own shipping interest, which contend on the occasion of every new treaty, that it would be ruined by foreign competition. Nevertheless, it has gone on to flourish with the general prosperity that reciprocal treaties aided in promoting. In the same manner the corn laws gradually modified, as they became effective, for the purpose for which they projected, and on the 1st February, 1849, were finally repealed. On the same day which those laws that had afflicted the statute book for nearly 200 years expired, the sovereign of Britain, in a speech from the throne, on opening a new session, remarked, in relation to the navigation laws, as follows:—

"I again commend to your attention the restrictions imposed on commerce by navigation laws.

"If you shall find that these laws are, in whole or in part, unnecessary for the maintenance of our maritime power, while they fetter trade and industry, you will, I trust, deem it right to repeal or modify their provisions."

In accordance with this suggestion the ministers brought in a bill, by which it was proposed to remove all restrictions upon the three following clauses in the present act, viz: those which relate to the carrying trade, to the long voyage trade, the laws which regulate the registration of ships and seamen, so as to allow British ship-owner to purchase his ships from foreign ship-builders, and like to abolish the obligation to have a certain number of apprentices. The second reading of the bill is fixed for the 5th of March, at which time it was expected that the British government would have received replies from those countries to whom application has been made, to know what course they would pursue should England repeal the navigation laws. It is also said that Mr. Bancroft stated, that, as far as the British Parliament in this matter may be ready to meet them, he is ready to meet them; and that he is willing immediately to enter into terms of reciprocity, so as to open the entire coasting trade of the two countries to the vessels of both nations.

In the strength of this rumor, the Hon. Daniel Webster moved the following resolution, which was adopted, in the United States Senate, March 12:—

Resolved, That the President be requested, if not incompatible with the public interest, to communicate to this Senate the instructions, if any, to the Minister of the United States at London, authorizing him to extend further the relations of reciprocity in the navigation laws between the two countries, and especially such instructions, if any, as contemplate the opening of the coasting trade of the United States to ships and vessels of other nations."

In reply, a confidential message has been communicated to the Senate by Mr. Clayton.

It is understood that no such instructions ever emanated from the Department to Mr. Bancroft. A sort of informal proposition was submitted to the Government through Mr. Bancroft, last summer, by Lord Palmerston, for a free trade in ships, to be secured by a convention, by which American vessels would be legalized in British ports, and British vessels in American ports. The question as to how far it would be advantageous to the United States was mooted, but no conclusion ever arrived at.

The idea that the ships of one nation can successfully compete with those of another nation in its own coasting trade appears to be purely chimerical. No na-

tion can spare ships and men in such abundance as to do the internal or coasting transportation of another nation's products on better terms than that nation itself. The tonnage of the United States amounts to 1,241,312 tons engaged in the foreign trade, and 1,597,732 tons in the coasting trade. This does not indicate the real trade, however, as the registered tonnage, or that employed in foreign trade, transports a good deal of merchandise coastwise.

The exigencies of the harvests in 1847 compelled France, Belgium, Holland, and England not only to suspend corn laws, that they might get food on any terms, but also the navigation laws, in order that any nation that had the means might transport the food without hindrance. The effect was not to promote any material change in the direction of trade, nor to interfere with the regular business of the shipping of any nation. The foreign trade between England and the United States is conducted on equal terms, and the American tonnage entered the United States from England in one year is 426,501 tons, against 325,831 tons English. Now, if the English cannot obtain an equal share of the international trade when placed upon the same footing, how is it to be supposed that they can obtain the coasting trade of the United States?

COMMERCIAL REGULATIONS.

REGULATIONS OF THE WAREHOUSING SYSTEM.

THE UNITED STATES TREASURER'S CIRCULAR OF INSTRUCTIONS TO COLLECTORS AND OTHER OFFICERS OF CUSTOMS.

As the following circular contains information in regard to the practical operations of the Warehousing System, of interest and importance to importing merchants, we have obtained from the Department at Washington an official, corrected copy, and now publish it entire, with the exception of the forms referred to in the body of the instructions, which are furnished at the several custom-houses.

TREASURY DEPARTMENT, February 17, 1848.

The 5th Section of the Act of 6th August, 1846, entitled "An Act to establish a Warehousing System," &c., is in these words: "That the Secretary of the Treasury be, and he is hereby authorized to make, from time to time, such regulations, not inconsistent with the laws of the United States, as may be necessary to give full effect to the provisions of this Act, and secure a just accountability under the same."

Under the power granted by this section, this Department, availing itself of the experience derived from the practical operation of the system in this country, during the last two years, and having obtained full information in detail of the mode of warehousing on the continent of Europe, and in Great Britain, now issues the following forms and instructions, in place of those heretofore issued, with a view to enlarge the benefits of the system in this country.

SEC. 1. On the arrival of any goods, wares and merchandise, from a foreign port, and at any time within the period allowed by law, for the discharge of the vessel in which they may have been imported, the importer, consignee, or agent (with proper power of attorney) thereof, may enter the same for warehousing in the form hereinafter prescribed, designating at the same time, with the consent of the Collector, the place of storage, as hereinafter provided for.

SEC. 2. It being the intention hereafter, of this Department, to use as bonded warehouses, under the Act of August 6th, 1846, in addition to stores owned and leased by the United States, such private stores as may be fully adapted to the purpose, separating, as much as possible, the government from any interference not required by law, or the public interest, with the business of storage, or of labor on merchandise, and

such storage or labor to be, as far as lawful and practicable, a matter of arrangement between the importers of merchandise and the owners or occupants of private warehouses; the following rules and regulations will control you in the management of such stores, the selection being first approved by the Department in each case.

In cases of private stores, the law, which the Department is not at liberty to disregard, requires that they "shall be kept under the joint locks of the inspector and collector; but no delivery shall be made without a permit in writing, under the hand of the collector and Naval Officer of the Port." The law further declares that "if any proprietor of any warehoused goods, or any person in his employ, shall, by collusion, fraudulently open the warehouse, or shall gain access to the goods in the presence of the proper officer of the customs, acting in the execution of the law, such importer or proprietor shall forfeit and pay, for every such offence, one hundred dollars." The proper officer of the customs here referred to, in whose presence the importer, when the goods are stored in private stores, can gain access to them, is an inspector, that being the class of officers, under whose lock and key, as that of the importer, such private bonded warehouses must be kept.

3. Stores to be private bonded warehouses, and to be used for the storage of dutiable merchandise, will be required, in all cases, to be first class fireproof according to the classification of insurance offices at your port, and must be so certified by them in writing to the Collector, before an application to use them will be considered.

Bonded warehouses under the Act of August 8th, 1846, will hereafter be known and designated as follows:—

1st. Stores owned by the United States, or leased to them prior to the date of the construction, the leases of which have not yet expired or been cancelled, heretofore known as public stores. All unclaimed goods must be stored exclusively in these stores when there are such at the port, and they are also to be used for the storage of foreign merchandise, as hereinafter provided for. In relation to these public stores the following are the provisions of the sixth Section of the Act of March 3, 1845, in assent of the Department being required by other laws.

As it further enacted, That all stores hereafter rented by the Collector, Naval Officer or Surveyor, shall be on public account, and paid for by the Collector as such, and be appropriated exclusively to the use of receiving foreign merchandise, subject to the rates of storage, to regulation by the Secretary of the Treasury.

Stores in the possession of an importer and in his sole occupancy, which he may place under the customs lock, in addition to his own lock, (said locks and keys of a different character, as required by law,) for the purpose of storing dutiable merchandise imported by himself only.

Each store shall be appropriated to this sole purpose, under the regulations here provided, and for this privilege, with the time of the customs officer necessary in attendance at such store, he shall pay monthly to the Collector of the port a sum equivalent to the pay of such officer, who must be an inspector, or one-half the amount which would accrue as storage on the goods so stored, at the rate charged at stores, Class No. 1. All the labor on goods so stored must be done by the importer, at his own expense, under the supervision of the officer in charge. Before any importer shall be permitted to use his own store, per Class 2, he must first make upon the entry for warehouse his written request to use such store as a deposit, and also endorse thereon an agreement to pay to the Collector an amount equal to the salary of the inspector, or one-half storage, then to be determined by the importer.

Stores in the occupancy of persons desirous to engage in the business of storing merchandise under the warehouse Act, and of performing the labor on such goods, what is usually termed the storage business,—the buildings being first examined by the person appointed by the Collector, and found to agree with the requirements of these instructions, and the selection having been approved by this Department, an inspector shall be designated for its superintendence, the owner or occupant agreeing to pay to the Collector monthly, a sum equivalent to the salary of the inspectors required in the superintendence of the goods and store, the whole building being appropriated to this purpose, as required in Class No. 2. Merchandise entered for warehouse will only be stored in these stores when the same are approved by the Collector or chief revenue officer of the port, and the importer, consignee, as the place of deposit, and the stores are to be "secured" as

provided in 1st Sect. Act 6th of August, 1846, "under the joint locks of the inspector and the importer," the latter appointing the owner or occupant of such store as his agent and custodian, to have the custody of the goods and possession of the key allowed to the importer,—this appointment to be per Form 25. The labor performed on the goods shall be under the control and at the expense of the owner or occupant, and the store shall be subject to such further rules as this Department may deem necessary, from time to time, for the safe keeping of the goods and protection of the revenue, and to be discontinued as a bonded warehouse when the public interest may require. All arrangements as regards the rates of storage, and the price of labor in these stores, must be made between the importer and the owner or occupant of the store, and all amounts due for storage and labor must be collected by the latter, the Collector looking only to the safe custody of the merchandise, for the security of the revenue.

Before any person shall be permitted to open a store under Class No. 3, he shall enter into bond in such sum, and with such sureties as may be approved by the Collector and this Department, exonerating the government, as also the Collector, and all other officers of the customs, from any risk growing out of the joint custody of goods stored in said stores, such bond to be per Form K.

These stores shall be under the joint lock of an inspector of the customs (to be designated by the Collector) and the owner or occupant acting as agent for the importers warehousing their dutiable foreign merchandise in such store. Should the amount of business at any one store require, in the judgment of the Collector, the services of more than one inspector, the owner or occupant shall be required to pay monthly, such additional sum to the amount named above, as will be equivalent to the salary of such additional inspector or inspectors required in attendance. The owner or occupant of such store will, however, be allowed the option of paying the salary of such inspector or inspectors, or of paying monthly to the Collector, one-half storage at the rates charged in public store, Class 1; this choice to be determined before any goods are placed in said store.

The stores described in the 2d and 3d class will be required, previous to their being used for the storage of bonded goods, to have such fastenings on the doors and windows as the Collector may deem requisite for the security of the property stored, all such doors and windows to be fastened on the interior by strong iron bars, except one entrance in front, to be secured by locks as before described. The store must be separated from any adjoining building by a brick or stone wall, in which no door or other opening will be permitted, and must have a party wall above the roof.

For the storage of wines and distilled spirits only, cellars of stores, occupied for general business purposes, may be used, under store classification No. 2, for the storage of wines and distilled spirits imported by the owner or lessee only. Though the rest of the building be otherwise occupied, the entire cellar or vault shall be exclusively appropriated to this purpose, and shall have no opening or entrance except the one from the street, on which the locks are to be placed.

The remuneration of the officers shall be either the pay of the inspector or one-half the storage, as in store Class No. 2, to be determined in advance by the importer; and one officer may have in charge as many cellars as, in the judgment of the Collector, he can superintend efficiently, not exceeding six. The cellars of any stores Class 3, may be used for the storage of wines and distilled spirits, under the same rules as other merchandise in said stores.

For the storage of coal, mahogany and other woods, sheds or yards may be used, under the regulation as prescribed for stores classed No. 2 and 3, provided such shed and yard can be properly fastened and secured, so as to ensure the safety of the property. The compensation of the officer or officers required to be at the option of the owner, to be determined in advance, as in stores Class 2.

A counting room for the accommodation of the owner or occupant may be allowed in stores classed 2 and 3, but such office must be separated by a permanent partition, with no door or other opening therein from the rest of the store, and have a separate entrance from the front. This partition must be strapped with iron, in such a manner as to enable the inspector to ascertain whether access has been had to the store. The officer in charge must be allowed such use of this office as may be necessary for him in making his daily return of receipts, deliveries and examinations.

After stores have been approved and placed under customs lock, the Collector will retain the right of ordering such additional fastenings to be placed thereon as experience may suggest to be necessary, such extra fastenings to be made by and at the expense of the owners or occupants having charge of the premises.

ing these stores, the Collector will be careful to take only such as combine to place of landing of the goods, with every facility for receipt and delivery, examination, &c., according to the description of goods to be stored. and increasing the number more than is necessary, due regard being had to of officers employed at the port, the time required for their attention at and the restrictions of the number of inspectors and officers by the act of 1844.

the wish of this Department to encourage the building of substantial fire-houses, where goods may be stored free from the risk of fire, and the commodious vaults for the reception of wines and distilled liquors, such as required by our rapidly increasing commerce, as well as to prevent or disastrous fires in our great cities, and the loss or refunding of the duty on the goods, the Collector will, in every instance, give the preference to buildings constructed, more particularly where the same are built of brick, stone and different floors separated by iron doors, and iron covers to hatchways, having or other combustible material whatever. In selecting between such fire, the preference should be given to those having an iron roof and rafters, window frames, sashes and shutters, iron joists, iron slabs for floors, or other material, and iron beams and pillars where necessary.

the owner or occupant of any store, cellar or yard, neglect or refuse to pay for the sum required by these instructions for the use of an inspector or as the case may be, or fail, or refuse to comply with any law regulating the merchandise, or any rules or regulations issued by this Department or by for the safety of the goods so stored, the Collector shall refuse permit goods in, or to deliver any from such store, and report the facts at once to the Department for its further action.

All private bonded warehouses must be placed in custody of an inspector of , who will always keep the key thereof in his own possession, and personally attend the opening and closing the doors and windows. He must be in attendance at the store from sunrise to sunset, except at the time necessary for not over one hour at noon, when the store must be closed. He will not suffer goods to be received, delivered, sampled, packed or repacked, except in his presence and in pursuance of an order from the Collector, in the manner hereinafter

The Collector will require of him to keep an accurate account of all receipts of goods, orders for sampling, examinations, repacking, &c., in such manner as he may direct; and he shall be required to report to the Collector and Superintendent every infraction of any warehouse rules and regulations, at his store by any person or persons. He will not be permitted to reward or gratuity from any source, in addition to his pay from the United States, as prescribed in the 78d Sec. Act 1799, which Collectors will rigidly enforce. No person shall be allowed to have more than one store, of Class No. 3, under his name. It shall be the duty of the Collector, at least once a year, (or as much oft may deem requisite,) to transfer the officers in charge of stores Class Nos. 1 and 2 from one store to another, thus preventing any officer having the charge of a store for a longer period than one year. The officer so transferred shall furnish his successor with a complete inventory of the goods in such store, and it shall be the duty of his successor, immediately on taking charge, to examine the goods in the store, if they agree with the inventory, and the result of this examination shall be reported to the Collector within ten days from the date of his taking charge of the store. Should any discrepancies be found between the statement of the officer and the inventory taken, the Collector will immediately investigate the same time reporting the facts to this Department. Public stores will be kept open for the convenience of the same officers, and be kept open for the transaction of business the same hours as heretofore; but all the regulations here prescribed as to the delivery, examinations, sampling, packing and repacking of goods, and books and vouchers, must be observed in them as well as in private ware-

When goods are sent from the ship or vessel in which the same may have been landed, to a warehouse under a warehouse permit, each cart or lighter load accompanied by a receipt, describing the marks, numbers and description of the goods. This receipt will be signed by the inspector in charge of the store, on due delivery of the goods, and will be returned by the drayman or lighterman to the inspector of the vessel. These cart or lighter receipts are to be numbered progres-

sively; and in case the numbers do not arrive at the store in due course, the inspector in charge of the store shall inquire into and ascertain the cause, and if there be any appearance of fraud, he shall acquaint the Collector therewith without loss of time.

The officer at the warehouse, on receiving the goods, will compare the marks and numbers with the receipts, and keep an account of these particulars in his official book of receipts, together with the number of the floor, and the part of the store where the goods are deposited, that he may at any time be able to find the goods from the description in his official record. When deliveries of goods take place, such delivery will be noted on the same record opposite the account of receipt, in order that it may be ascertained at any time, on the examination of such record, what part of each lot or parcel of goods remain in store. This record must also contain full particulars of any repacking of the merchandise and sampling of liquors for transportation, when the same are authorized by the Collector under these instructions.

SEC. 6. In each of the ports of Boston, New York, Philadelphia, Baltimore, Charleston, and New Orleans, the Collector shall designate, with the approbation of this Department, from among the officers or clerks, some suitable person, to be designated warehouse superintendent, whose duty it shall be to superintend all the public and private stores in such ports, visiting them daily to ascertain whether the officers are regular in their attendance, the books correctly kept, and whether all the regulations issued by this Department are correctly observed and diligently enforced. It shall further be his duty, under directions from the Collector, to examine all stores which the owners or occupants thereof may desire to have made bonded warehouses, under these instructions, and make report thereof to the Collector, and after such have been approved, to make such daily examination of their condition to ascertain the security of the same, and what additional fastenings, &c., may be necessary for the security of the property. He will also superintend, with the inspector of the store, all silks withdrawn for printing, dyeing, &c., as provided in these instructions, taking an account of the same, and it shall be the duty of the person or persons withdrawing such goods for dyeing, &c., to notify the warehouse superintendent, that he may be present at the place and time required. Such superintendent shall have a desk in the custom-house, and shall be required to make a daily report to the Collector of every violation of the warehouse instructions and rules, and of all other matters coming under his observation, of importance to the security of the revenue. This officer is not intended to interfere with the duties of the storekeeper of the port, in his charge of the receipts and deliveries of goods in all the stores, and keeping the accounts of property in each, as has heretofore been the case, but is, under the direction of the Collector, to have a general supervision of the warehouse business, to see that the laws and regulations are faithfully observed by the inspectors in charge of each store, and the importer or agent having joint custody. He will also perform such other duties in addition to the above as the Collector may devolve upon him.

SEC. 7. At those ports where stores are owned or have been leased by the United States, and the leases of which have not expired and been cancelled, in compliance with the instructions of this Department, said stores being classified in these instructions as Class 1, the Collectors will, on entry for warehousing, first fill said stores with such goods as are proper to be stored therein, due regard being had to the description and character of the goods and place of deposit. In all other cases the importer, consignee or agent shall be at liberty to select the place of storage from any stores, yards or other places previously approved as bonded warehouses, under classifications 1, 2 and 3.

SEC. 8. All merchandise thus stored may be examined at any time, during the business hours of the port, by the importer, consignee or agent, who shall have the liberty to take samples of his goods in quantities according to the usage of the port, make all needful repairs of packages, and to repack the same, provided the original contents are placed in the new packages, and the original marks and numbers placed thereon, in the mode prescribed in the 75th Section of the Act of 2d March, 1794, and 32d Section, Act 1st March, 1823. He may also have any further privileges, to facilitate the sale of his goods while in bond, which the Collector of the port may deem advisable, and not inconsistent with law or the safety of the revenue; provided, that no samples shall be taken, nor shall any goods be exhibited or examined, unless under the immediate supervision of an inspector of the customs, and by order of the importer, owner or consignee, at his expense; nor shall any package be repaired or goods repacked without a written order from the Collector of the port.

SEC. 9. All goods unclaimed by the owner or consignee at the expiration of the pe-

ried allowed by law for the discharge of the vessel in which the same may have been imported, shall be sent by the Collector to the stores owned or leased by the United States, Class 1, if there be any at the port. If there be no such stores, then said goods shall be deposited in safe warehouses, temporarily hired for that purpose by the Collector, and under his sole custody. The owner or consignee of such goods may, at any time thereafter, within the period provided by law, be allowed the privileges herein granted to bonded merchandise, on making due entry thereof for warehousing. After having been entered for warehouse, these goods cannot be transferred to other stores, but must remain in the place where originally deposited till payment of duties, unless withdrawn for transportation to another port in the United States, for exportation, or the better security of the revenue requires their removal.

SEC. 10. In all cases where the Collector may be called upon to exercise the discretion given him in the 56th Sect. Act 1799, to take possession of merchandise remaining on board a vessel, five days after her entry at the custom-house, or whenever it may be necessary on account of a vessel's being leaky, or from other cause or casualty, to take possession of her cargo, as required by the 60th Sect. Act 1799, he will require, as a condition of granting the permit for discharge, the right to order the vessel to be removed, at the expense of the owner, to such place, wharf, or pier, adjacent to the stores owned or leased by the United States, Class 1, where such goods must be stored, (if there be any at the port,) as may be most convenient for unloading the goods, and their safe and economical storage. This order, however, is not to apply to steamers, where particular instructions have already issued from this Department, or at ports where no such stores exist.

SEC. 11. Wines and distilled spirits, heretofore deposited in public store under the direction of the Surveyor, or in private stores, under the joint custody of the Surveyor and importer, to secure the right of drawback on the exportation thereof, must be stored, hereafter, in the stores owned or leased by the United States, Class No. 1, or in stores Class 2 or 3, in joint custody of the Collector and importer, in the same manner as herein provided for other merchandise. In all cases, the duties accruing thereon must be paid within one year from the date of importation, as provided in the 1st Section of the Warehouse Act; but such goods must still remain in the place where stored, after the duties have been paid, to secure the right of drawback on exportation. To prevent errors, and to distinguish the wines and distilled spirits, on which the duty may have been paid, it shall be the duty of the officer having charge of the store where the same may be deposited, on being notified by the Collector that the duties have been paid, to brand the cask or other package with the words *duty paid*. Any other merchandise which the importer or owner may have in warehouse, after the duty thereon is paid, shall also, on notification thereof, as above, be branded *duty paid*, and may remain in warehouse on the payment of storage.

SEC. 12. The entry of goods for warehouse on arrival from a foreign port shall be made as per Form 1, and must be verified under oath or affirmation, as prescribed by the 4th section of the act of 1st March, 1823, and Treasury Circular, August 14, 1846, all the requirements of the 6th, 7th, 8th and 11th Sections of that act being strictly adhered to, and all acts necessary to determine their exact quantity, quality, and original cost, and dutiable value, such as appraising, weighing, gauging or measuring, in order to ascertain the precise amount of duty chargeable on the goods, must be performed and complied with. If part of an importation is to be landed and the duties paid forthwith, and the remainder warehoused, the two entries must be made simultaneously, and the oath altered to correspond. If no invoice has been received, the goods cannot be entered for warehousing, but shall be stored in public stores as other unclaimed goods.

SEC. 13. When the duty has been estimated by the Collector and Naval Officer, and the stores designated and agreed on, the Collector shall take a bond, with satisfactory security, according to Form A, in double the amount of duties; he will then issue a permit, Form 12, to the discharging officer to send the goods, according to the usual custom of the port, to the store designated therein, with the exception of those which may be ordered to the Appraisers' stores for examination. Such order must also indicate what goods are to be weighed, gauged or measured, and such necessary weighing, gauging or measuring is in all cases to be done before the deposit of goods in warehouse.

SEC. 14. When that portion of an invoice which may be designated by the Collector, and sent to the Appraisers' store for examination, shall be examined by the Appraisers, said goods shall be removed to the warehouse, where the remainder of the

goods described in the invoice have been deposited, the expense of such removal being borne by the importer.

SEC. 15. When the goods have been deposited in warehouse, and the dutiable value, quantity and character thereof ascertained, and the damage, if any, assessed in the manner provided by law, and after the report of the Appraisers has been made to the Collector, the importer, agent or purchaser may withdraw any entire case or package, or any quantity not less than one ton in weight, if imported in bulk; but no goods on a wharf or pier, or on board a vessel, are to be considered constructively warehoused, except when specially provided for by these instructions.

SEC. 16. On the withdrawal from warehouse, and payment of duty, the entry shall be made per Form 2, a duplicate being deposited with the Naval Officer, and upon the payment of duty thereon, a permit, Form 18, shall be granted for the delivery of the goods.

SEC. 17. If withdrawn for transportation to another district, the entry shall be made as per Form 3, and the person so entering shall give bond, with satisfactory security, according to Form B; and a triplicate copy of said entry, with the duties estimated thereon, having been deposited with the Collector, to be forwarded by him to the port where said goods are destined, together with a certified copy of the invoice, with the Appraisers' report thereon, a permit shall be issued, Form 18, countersigned by the Naval Officer, to deliver the goods to the person withdrawing for transportation.

SEC. 18. When goods have arrived at port of destination, they must immediately be entered for warehousing, as per Form 5, and verified by oath, Form 14, such re-warehousing entry being in all cases a copy of withdrawal entry at port of last withdrawal. On being sworn to, and the place of deposit having been agreed upon, as hereinbefore provided, for goods on arrival, and a bond, with satisfactory security, taken, Form C, the Collector shall issue an order, Form 15, to the storekeeper, to receive said goods in the warehouse designated therein.

On the same examination being made of the goods as is required by law, on the importation of merchandise from foreign ports, if the Collector is satisfied that the goods so examined are the identical goods described in the entry and invoice received by him, he will send notice of the same, Form 17, to the Collector of the port where withdrawn, to cancel the bond there given. If, however, the consignee or owner should desire to pay the duty and get possession of his goods immediately on their arrival, an entry may be made, per Form 6, and a permit, Form 16, countersigned by the Naval Officer, be given for their delivery. Such goods need not go to a warehouse, nor be examined by the Appraisers, but may be considered constructively warehoused. The amount of duties paid shall be, in all cases, the amount assessed at first port. Notice of the payment of duties, Form 17, shall be sent to port where withdrawn, to cancel the transportation bond there given.

SEC. 19. Should merchandise, after being re-warehoused, be withdrawn for consumption, transportation or exportation, the entries shall be made as per Forms 6, 7, and 8, and all other regulations, as to bonds, oaths, examinations, &c., be complied with, as herein provided for entries at first and second ports, all transportation entries being made in triplicate, and such triplicate to be forwarded by the Collector to port of destination, with a certified copy of, or extract from invoice.

SEC. 20. When goods are withdrawn from warehouse, at port of original importation, for exportation, the entry must be made per Form 4, the oath prescribed in Form 18 be taken, and a bond with satisfactory security, per Form D, for the delivery of the goods at a foreign port or place. When the bond is received, the Collector and Naval Officer will issue a permit, Form 19, to deliver the goods to the Surveyor, and shall direct the Surveyor to cause the same to be laded on board for exportation, indicating which are to be weighed, measured and gauged, which directions shall be as per Form 20, the officer under whose inspection the goods are shipped must certify as the entry, as per Form 21. To cancel the export bonds, Form D, the exporter must furnish the proofs required by law. If goods are exported from other than port of original importation, the entry must be per Form 8, the other forms being the same, altering the words "imported into" to "brought into," as they occur in the bond and permit.

SEC. 21. If merchandise be withdrawn from warehouse for transportation through the United States to Canada, entry must be made per Form 9, always stating therein the last port in the United States, whence the same are to be shipped to Canada, and a triplicate copy of such entry, with a certified copy of the invoice, to be deposited with Collector at time of making the entry, and to be by him forwarded to such last

port in the United States, as in the case of transportation entries. The entry to be verified by oath, as per Form 23, and bond given, as per form E, for the safe transportation through the United States, and their landing in Canada; a permit shall then issue, per Form 24, countersigned by Naval Officer, for the delivery of the goods.

To prevent frauds on the revenue, the Collector, before delivery, will have all goods in boxes, cases, bales or casks, corded, and a lead seal attached thereto, to prevent said package from being opened; cigars in small boxes must be packed in cases, and sealed as above. Wines and distilled spirits, in casks or other packages, must have the number of bung or other holes in such package legibly branded on the exterior, and all such holes must be sealed, to prevent adulteration or alteration in transit; he will also take a sample of each package of liquors, except when in bottles, not exceeding in quantity eight ounces, all of which samples must be immediately deposited with the storekeeper of the port, who will hold them subject to the orders of the Collector. The expense of sealing, branding, encasing and sampling, to be paid by the owners before delivery, the triplicate entry forwarded, as before provided for, to specify particulars of sealing and branding. On arrival at the last port in the United States, designated in entry, and on notification thereof, Form 22, the Collector of such port will cause the goods to be examined, to ascertain if the cords and seals are perfect, and, if found correct, will allow the same to be laden for exportation to port of destination, in the usual manner and under the superintendence of a proper officer, without further entry. Goods in bulk, or other articles which cannot be sealed, as raisins in boxes and similar articles, sugar, molasses, flour, &c., must be examined by the Collector before the same are allowed to be exported and weighed, gauged and measured, if necessary. All goods so arriving, if an opportunity offers for immediate shipment and export, and a satisfactory examination can be had, in the judgment of the Collector, without placing the same in store, may be considered constructively warehoused, and accounted for as warehoused and withdrawn for export, in the returns to this Department.

No export bond is required at last port of exportation, the bond at port of withdrawal extending, as before stated, to their landing in Canada. The same forms of entry, and the same regulations are to apply at ports on the Canada frontier to goods from Canada, warehoused at those ports, to be transported through the United States for shipment to foreign countries. If the triplicate entry be found correct on examination, as provided for above, the Collector will give notice thereof, per Form 17, to the Collector of the port where withdrawn from warehouse, who, on receipt of the same, with the usual landing certificate, or other proofs similar to those now required on goods exported for benefit of drawback, will cancel the bond taken by him. Great care should be taken at the port of export to ascertain that no change has been made in the contents of packages, and that no alteration or fabrication of the seals or brands has been committed. Should any such change, alteration or fabrication have taken place, or other circumstances have occurred in the transit, to induce the Collector to suspect fraud, he will take immediate possession of the goods, and send a statement of the case to this Department, at the same time notifying the Collector of the port whence withdrawn of the detention. Should any delay occur in the exportation of such goods, for want of vessels or other cause, the Collector shall take possession thereof, depositing them in the stores belonging to or leased by the United States, Class 1, if there be any, or if there are no such stores, in approved warehouses, to be engaged temporarily for that purpose. The expense of such storage, with all other charges except weighing, gauging and measuring when necessary, to test the correctness of the quantities specified in the accompanying entry, are to be paid by the owner or agent before the delivery of the property for export.

SEC. 22. On the arrival from foreign ports of any goods destined for immediate transportation to other ports in the United States, instead of first warehousing the goods, and then withdrawing, per foregoing forms, the warehousing and transportation may be combined in one entry, see Form 10; the oaths to be the same as prescribed in original warehouse entry, and the bonds as per Form F. In all other respects, the foregoing regulations, as to warehouse and transportation entries and examinations, to be complied with; all such goods to be considered constructively warehoused in the Collector's accounts at port of importation, in the United States. On giving bond, as above, permit shall issue, Form 12, to send goods to public store, if there be any; if not, to such warehouse, Class 2 or 3, as may be agreed on, while examination is being made by appraisers. If the goods be returned as correct, a permit, Form 13, shall issue, to deliver for transportation. When the permit is given as above, Form 12,

should the importer give penal bond, Form G, to deliver other packages for examination, besides those at the time designated, if the same should be required by the appraisers, the Collector may deliver from the vessel, for immediate transportation, the remainder of the goods as per entry, except liquors and cigars, which, in all cases must go to a public store, if there be any; if not to a warehouse, Class 2 or 3, for sealing and casing.

SEC. 23. On examination, by the appraisers, of merchandise entered for warehouse, should the invoice thereof be found undervalued, and a penal duty incurred, such penal duty must be paid before their delivery from warehouse for consumption, or withdrawal for transportation to another port, or before permission is given for lading the goods on board a vessel for exportation to a foreign port, as provided for in circular from this Department, dated June 12th, 1847.

SEC. 24. All claims for damage on the voyage of importation on goods warehoused, must be made within ten days after date of landing, and such damage assessed and Collector's order for appraisement returned, with the appraisers report thereon, within twenty days from the date of its issue, or such damage will not be allowed. See Treasury Circular, No. 33.

SEC. 25. All wines and distilled spirits transported in bond, from one port to another, must be branded and sealed, and all cigars so transported must be encased and sealed, before delivered from store, in the same manner as provided for when passing through the United States to Canada.

SEC. 26. Pongees and other plain white silks in bond may be withdrawn from warehouse to be colored, printed, stained, dyed, painted or stamped, the Collector taking a deposit in money, equal to the amount of duties ascertained to be payable, which deposit shall be refunded, if the goods aforesaid be returned to the warehouse repacked, in the original condition, and according to original marks and numbers, within sixty days from date of delivery thereof. Each package shall, before the same be delivered from warehouse, be opened and examined by the proper officer of the customs, and the contents thereof measured or weighed, and the quality thereof ascertained, and a sample of each piece thereof reserved at the custom-house, and a particular account or registry of such examination shall be entered on the books of the custom-house. On the return of said goods, if the Collector shall be satisfied that the contents of each package are the identical goods imported, and registered as aforesaid, and not changed or altered, except by being colored, dyed, stamped, stained, painted or printed, as aforesaid, he shall thereupon refund the deposit as aforesaid, and said goods shall be entitled to the same privileges as if in original condition, as per 4th Sec. Act 22d May, 1824.

SEC. 27. To secure a just and accurate accountability, and to enable the returns required by this Department, per 4th Sec. of the Act of the 6th of August, 1846, to be prepared correctly and forwarded promptly to this Department, the warehouse accounts will, from and after the receipt of these instructions, be kept in the form and manner as prescribed in Forms H and I. The accounts per Form H, will be those of each importer, a separate account for each entry kept in alphabetical order, in reference to names of importers, and posted daily, so that the liability of importers, under their several bonds, can be at once seen on reference to the account. The accounts, Form I, will be of each class of articles warehoused, to be kept under the several classifications per memorandum M, annexed. These accounts to be kept in debit and credit form, debiting the account with the quantity and value of the article per warehouse entry, and crediting it with the withdrawal entries for transportation, exportation, or consumption. Separate ledgers, but kept in the same manner, will be opened for goods brought from other districts where they have been warehoused, thus separating the goods "brought into" from those "imported into" your district.

The balance of accounts, Form I, will consequently give the quantity and value of each description of goods in warehouse, and a transcript of such balances will form the quarterly statement required by Sec. 4 of the Warehouse Act. Great care must be taken to have these accounts strictly correct, and to secure every entry either for receipt into or withdrawal from warehouse, being posted. Collectors will require that no permit, either for warehousing, or for withdrawal for consumption, transportation, or exportation, be signed, until it has passed through and received the check of the clerk having charge of the ledgers in which the accounts are kept. The returns heretofore received at this Department being deficient, in many cases, in the quantities, Collectors will require, in every instance, that the entries, either for warehouse or withdrawal, contain the quantities in pounds, yards, gallons, &c., as well as the value of

la. As these entries, or a true copy, will form the basis of the warehouse (the accounts being posted from them,) whenever any alteration is made in the entry, either in quantity or value, by appraisement or otherwise, the original amended, must be sent to the warehouse clerks, that their accounts may be conform to it. No withdrawal permit must be checked till such alteration, if, has been made. When goods are allowed to be constructively warehoused instructions, they must, in every case, appear on the warehouse books, and as warehoused, and withdrawn in the same manner as if the goods were de- store.

Quarterly report, indicating what goods may remain in warehouse, must be sd to this Department within thirty days from the expiration of each

tion to the quarterly report of goods in warehouse, a quarterly statement of received from, and transported to, other ports in the United States, will be d to this Department, as required in Treasury instructions of October 30, hin thirty days from the expiration of the quarter. The new forms of ac- w furnished will enable this statement to be made with but little additional

c. The storekeeper, or whatever clerk or officer may have charge of such bu- ll hereafter keep a daily record of all receipts and expenditures for storage, l cartage at the Appraiser's and other stores, owned or leased by the United eping separate accounts for storage, for labor, and for cartage connected Appraiser's department, and a separate account of each of these items for the dic stores collectively, accounting monthly to the Collector for such daily red expenditures, who will forward quarterly such statements to this De-

. When any goods, duly warehoused, shall remain in store beyond one year yment of the duties and charges thereon, which, in pursuance of the ware-, are required to be appraised and sold, the Department hereby prescribes uch sales shall take place within thirty days after the expiration of the year, notice of such sales must be published in two or more of the public papers e most extensive circulation at the port in question, daily, at the principal the space of ten days, and at the other ports three times a week, or as often more papers may be published thereat for the space of two weeks. But, as rovides that all goods of a perishable nature, and all gunpowder, fire-crack- xplosive substances, deposited as aforesaid, shall be sold forthwith, they must t the earliest day practicable, after due publication of notice, and time given tion by persons desirous of purchasing the same, and accounts of such sales rendered, as per Form prescribed in previous instructions.

c. When goods duly entered for warehouse have been deposited in public as 1, and the required examinations completed, the person making entry all be entitled to receive a certificate of their being so deposited, as per paying twenty cents therefor. Such certificate to be signed by the store- r such other officer as the Collector, with the sanction of this Department, gnate; such certificate to be cancelled as the goods are withdrawn from

.. When goods are withdrawn from warehouses in quantities less than the en- ration, the expense of weighing, guaging, or measuring must be paid by the rporter, or agent, if it be necessary to weigh, gauge, or measure such portion, to ascertain the dutiable value.

d. No allowances are to be made for loss or damage on merchandise while l in warehouse, or while in transit; the duties in all cases to be paid on and quantities as ascertained on the arrival and entry of such merchandise in d States.

e. Nothing in these instructions is to be understood as allowing importers to chandise in part of their own stores, placing temporary partition; therein, but s of the building, except in the case of cellars for wines, &c., must be used ex- fur the storage of bonded merchandise, and in case of cellars, the whole of or vault must be so used.

f. All moneys received by Collectors from owners or occupants of private tores in payment for half storage, or for the use of an inspector in attendance emises, will be accounted for as receipts for storage in their accounts with rtment.

SEC. 85. The storage charged on goods deposited in the public stores must be the usual rate at that port. The charges for labor at these stores must be at the lowest rate that will remunerate the government; and whenever the same is practicable, and can be done with safety to the revenue, importers may be allowed, under the proper supervision, to perform the necessary labor on their own goods. Collectors failing to demand and receive the amounts due for the storage and labor accruing in public stores, or the half storage, or the pay of an inspector required in private stores, will be charged with such sums in their quarterly accounts by the First Comptroller, whose attention has been specially directed to these instructions.

SEC. 86. No fire must be permitted in any warehouse, except in the business office attached thereto; and where lights are required, lanterns must be used, such as are in use in naval vessels, and known as magazine lanterns.

The Collector will cause copies of all instructions from this Department, in reference to the selection, management, and daily government of warehouses, with such other rules as he may deem necessary to carry the same into effect, to be printed and placed in a conspicuous place in each warehouse.

R. J. WALKER, *Sec'y of the Treasury.*

NAUTICAL INTELLIGENCE.

RECENTLY DISCOVERED SHOAL NEAR ST. MICHAEL'S.

DECLARATION OF THE MASTER OF THE WILLIAM, OF BANGOR, IN THE UNITED STATES.

On the 31st December, 1848, at nine, 30 min. A. M., bound from Terceira to St. Michael's, I saw breakers, mast high, some distance ahead, evidently caused by a Shoal, and not a floating mass: went about, and took sights, then half a mile North of them,

SIGHTS TAKEN AT TERCEIRA THE 30TH DECEMBER.

Time by chronometer	10 h. 34' 38"	Altitude	13° 15'
"	" 10 h. 35' 39"	"	13° 23'
"	" 10 h. 36' 31"	"	13° 30'

SIGHTS TAKEN HALF A MILE NORTH OF THE BREAKERS ON THE 31st DEC., AT NINE, 30 MIN. A. M.

Time by chronometer	11 h. 20' 15"	Altitude	19° 36'
"	" 11 h. 21' 15"	"	19° 40'
"	" 11 h. 22' 24"	"	19° 50'

Course from hence S. S. W. Good four miles per hour. Latitude by observation at noon, 38° 07". Chronometer being 3, 5-10, per day.

NOTE.—These observations, being worked out, gave the longitude 26° 41' 0" West of Greenwich, and latitude 38° 16' N.

DECLARATION OF THE MASTER OF THE TRES AMIGOS, OF ST. GEORGE'S, IN PORTUGAL.

On the 31st December, at about ten A. M., having been blown out from St. Michael's, reaching to the Southward I saw a Shoal, where the sea broke the height of a ship, at intervals of about ten minutes. Near us, reaching the same way, was an American brig, which, if it had been night, would have been wrecked on the shoal, but when they saw it they went about in the greatest haste. By my calculation the Shoal is in lat. 38° 18' N., and 26° 50' W. of Greenwich.

DECLARATION OF THE MASTER OF THE PLYMOUTH, OF THE UNITED STATES.

At nine, 30 min. A. M., on the 25th December, I saw the sea breaking heavily at the distance of two and a half to three miles N. N. W. of my ship. A heavy sea was running, the wind having moderated at N. W. from a S. W. gale of the night before. The water broke sixty feet high in different places, at intervals of about ten minutes, as if on an extended Shoal having several heads. It was certainly not a floating obstruction. I consider it a narrow Reef, about a mile in length, running from N. N. E. to S. S. W., about forty miles W. N. W. $\frac{1}{2}$ W. by compass* from the N. W. point of St. Michael's.

* This is probably true.

THE PORT OF BUENOS AYRES.

Office of the Captain of the Port of Buenos Ayres.

The national brig, *Cacique Catriel*, is stationed between Point India and the eastern extremity of the Ortiz Bank, in order to serve as a light hulk; a large lamp being every night displayed from her foretopmast, that it may serve as a guide to vessels proceeding to or departing from this port.

The hulk lies from Point India N. E. $\frac{1}{2}$ N. by compass, distance 10 miles; and from the head of the Ortiz S. $\frac{1}{2}$ S. W., also by compass, distance 8 miles; being in latitude $35^{\circ} 11'$, and longitude $57^{\circ} 8'$ West of Greenwich. According to the instructions given to the pilots, in conformity with the agreement entered into with the undersigned captain of the port, pilots will be found on board the said hulk, who will convey to this port all vessels bound hither.

PEDRO PORRENO.

NEW LIGHT-HOUSE ON THE PUNTE BIANCHE, ON THE ISLAND OF GROSSA, IN DALMATIA.

The newly-erected Light-house on the Point of Bianche, on the Island of Grossa, in Dalmatia, stands upon the point of land which, according to the Coast Chart of the Adriatic Sea, published by the I. R. Geographical Military Institution, projects between the Bays of Susciza and Kolubinka, and is about one Italian mile distance from the cliff Bacili, lying in the north-west. The geographical position of the same is $44^{\circ} 9' 0''$ North latitude, and $12^{\circ} 29' 30''$ East longitude, from the meridian of Paris.

This Light-house is lighted from 1st January, 1849, every night, by means of Fresnel's apparatus, third class, and gives a fixed light, which is interrupted every three minutes by a vivid flash, which is preceded and followed by a short period of darkness. The height of the light is 125 Vienna feet above the surface of the sea, and consequently, if the observer takes a position of twelve feet above the surface of the sea, the light is visible in clear weather at a distance of seventeen miles, (sixty of which to a degree.)

REGULATIONS OF MERCHANT VESSELS FROM CONSTANTINOPLE.

British Consulate, Dardanelles, 16th January, 1849.

In accordance with instructions from the Turkish government, the military governor of these castles has commenced to enforce a strict observation of the regulations whereby merchant vessels of all nations coming from Constantinople, and bound to the Mediterranean, are required to deliver at these castles the firmans (or passes) with which they are furnished at the capital. These regulations for some time past had not been always conformed to by masters of vessels, and consequently several vessels have already been fired at with shot by the forts, and more or less damaged for disregarding them. The passage of the castles between sunset and sunrise is strictly forbidden under any circumstances.

F. W. CALVEET.

ABERDEEN HARBOR LEADING LIGHTS.

The Parliamentary Commissioners of Aberdeen Harbor, having taken into consideration the existing regulation for extinguishing the Leading Lights when it is dangerous for vessels to enter the harbor, have resolved to do away with the same.

On and after Monday, the 12th day of March, 1849, the Leading Lights will be exhibited at all times, but that there will be a change in the color of the Lights when it is considered dangerous to enter the harbor.

The Leading Lights are of a Red color, but when it is dangerous to attempt entering the harbor, the Lights will be of a Green color instead of Red.

Observe.—The Red Lights are the Ordinary Lights, and the Green Lights the Danger Lights.

The Leading Lights have no reference whatever to the state of the tides, and are exhibited from sunset to sunrise.

ST. NICHOLAS GATWAY, YARMOUTH.

It having been ascertained that two patches have grown up in the track of shipping passing through St. Nicholas Gatway, on which there are no more than $2\frac{1}{2}$ fathoms at low water spring tides, and there being reason to apprehend that the water thereon

will gradually become less, notice thereof is hereby given, and masters of vessels, pilots, and others, having charge of vessels drawing more than 12 feet water, are hereby cautioned not to attempt the navigation through the said gateway, but invariably to use instead thereof the wide and deep water channel between the Scroby and St Nicholas or Kettle-bottom Sands, commonly called "Hewett's Channel."

COMMERCIAL STATISTICS.

TRADE OF THE PORT OF RIO DE JANEIRO.

We are indebted to our esteemed friend, L. H. F. D'AGUIAR, Esq., the Brazilian Consul General, residing at the port of New York, for the following statement of the trade of the port of Rio de Janeiro during the year 1848, as compared with the two previous years:—

ANNUAL STATEMENT OF THE TRADE OF THE PORT OF RIO DE JANEIRO DURING THE YEAR 1848.

The arrivals of ships were, from foreign countries, 1,147 with 259,917 tons, against 887 and 208,547 tons in 1847; and the clearances, 1,063 and 323,729 tons, against 867 and 268,457 tons.

The coastwise trade employed as follows:—

	ARRIVALS.		CLEARANCES.	
	Ships.	Tons.	Ships.	Tons.
1848.....	2,402	214,869	*2,383	192,476
1847.....	2,497	180,848	2,475	180,523

During the year arrived 210 vessels of 54,171 tons, and cleared 207 with 68,060 tons, under the American flag.

LEADING ARTICLES IMPORTED.

	1846.	1847.	1848.
Manufactures, cotton.....pkgs.	30,232	28,298	28,508
Codfish.....quintals	19,929	40,556	29,266
Coals.....tons	20,277	24,408	27,630
Ale and porter.....bbls.	30,960	9,074	18,728
Flour.....	212,407	188,254	229,830
Candles, sperm.....boxes	8,538	2,529	1,229
“ tallow.....	8,597	6,824	716
Wines, Portugal.....pipes	16,643	17,270	21,707
“ Mediterranean.....	16,086	2,500	4,344
“ Bordeaux.....	2,471	4,432	2,166

The articles soap and tallow candles have entirely disappeared in our importations, having been superseded by the home manufactures.

LEADING ARTICLES EXPORTED.

	1846.	1847.	1848.
Coffee.....bags	1,511,096	1,629,224	1,710,579
Sugar.....boxes	8,115	8,426	5,713
Hides.....No.	394,586	267,226	231,663

Throughout the year the money market was abundant, the rate of discount having been 7, 6, and 5½ per cent. Treasury Notes were discounted at 6, 5, and 4½ per cent. The highest rate of exchange on London was 28 per cent, and the lowest 21½ per cent. During the year the government took £180,000; the highest at 28 per cent, and the lowest at 23½ per cent.

The highest range of public stocks was 90 per cent, and the lowest 80 per cent. The total public funded debt is 47,921:000\$; and in Treasury Notes, 5,712:800\$.

* Including 312 steamboats.

IMPORT TRADE OF ST. LOUIS.

We gave, in an elaborate article on the "Trade and Commerce of St. Louis," published in the *Merchants' Magazine*, (August, 1846, vol. xv, pp. 168-9,) a table of imports of produce and merchandise into St. Louis for the years 1844 and 1845; and in the number for August, 1847, (vol. xvii, p. 173,) a similar table of imports for the years 1845 and 1846, compared. From the "Annual Review of the Trade and Commerce of St. Louis for 1848," as compiled for the *Missouri Republican*, we now add the imports of the different articles of produce and merchandise for the years 1847 and 1848, thus bringing down the table from 1844 to the close of 1848:—

IMPORTS INTO ST. LOUIS FOR THE YEARS 1847 AND 1848, COMMENCING JANUARY 1ST AND ENDING DECEMBER 31ST.

	1848.	1847.		1848.	1847.
Apples, green.. bbla.	12,628	2,128	Lead, bar..... lba.	.....	.....
Beef..... trca.	9,269	5,735	Lard..... bbla.	67,889	32,021
"..... bbla.	7,866	4,720	"..... kegs	14,180	8,595
"..... half bbla.	87	.....	"..... trca.	6,579	150
Bacon..... casks	25,820	14,425	Whiskey..... bbla.	29,758	22,239
"..... hhds.	3,603	.....	Brandy.....	3,333	1,116
"..... bbla.	2,847	.....	Wine.....	7,177	2,611
"..... boxes	3,775	1,289	Malt liquors.....	4,282	.....
Butter..... hhds.	66	.....	Lead, white... kegs	2,247	5,256
"..... bbla.	2,200	1,084	Molasses..... bbla.	21,948	21,554
"..... kegs and jars	8,131	4,199	Nails..... kegs	49,596	22,589
Brooms..... doz.	6,744	.....	Oils—linseed... bbla.	1,609	485
Beeswax..... bbla.	800	759	" castor.....	510	332
"..... bxa. & aka.	430	798	" lard.....	493	478
Bagging..... pieces	1,084	1,442	Onions..... bbla.	873	1,580
Beans..... hhds.	79	.....	"..... sacks	9,931	2,672
"..... bbla.	3,258	5,337	Oakum..... bbla.	816	1,072
"..... sks.	2,008	4,134	Oats..... bush.	243,700	202,365
Bran..... tons.	30	.....	Pork..... bbla.	97,662	43,314
"..... sacks.	63,726	.....	"..... half bbla.	1,923	268
Barley..... bush.	111,003	114,680	" in bulk..... lba.	8,454,000	285,797
Buffalo robes... packs	15,188	.....	Potatoes..... bbla.	2,424	2,852
"..... loose	2,227	7,782	"..... sacks	75,214	24,076
Corn..... bush.	699,693	1,016,318	Peltries..... pkgs.	1,889	2,697
Castings..... tons	428	1,764	Rice..... trca.	948	762
Cheese..... cakes	84	236	"..... bbla.	.....	.....
"..... boxes	8,333	12,150	Rye..... bush.	9,075	7,566
Cider..... bbla.	1,180	336	Rope..... hoop coils	12,633	10,798
Coffee..... sacks	78,842	77,767	Shot..... kegs	323	.....
Cotton yarns... packs	11,480	12,762	"..... bags	.....	88
Flour..... bbla.	387,314	328,568	Salt..... bbla.	38,600	44,386
"..... half bbla.	541	686	"..... sacks	204,744	106,392
Furs..... pkgs.	1,194	2,148	Sugar..... hhds.	26,116	12,671
Feathers..... sacks	856	384	"..... bbla.	7,946	4,083
Flaxseed..... bbla.	4,908	4,992	" Havana.. boxes	6,866	15,028
"..... sacks	7,349	.....	Tallow..... casks	398	112
Ginseng..... bbla.	119	14	"..... bbla.	797	2,217
"..... sacks	33	253	Tar..... bbla.	5,027	2,217
Glass..... boxes	19,834	18,722	"..... kegs	2,360	5,656
Hemp..... bales	47,370	72,222	Tobacco..... hhds.	9,044	11,015
Hides..... No.	62,097	71,877	" manufac. bxa.	5,446	6,548
Iron, bar..... tons	6,341½	15,070	Tea..... chests	2,384	3,023
" pig.....	4,463	2,729	Vinegar..... bbla.	608	1,233
Lead..... pigs	705,718	749,128	Wheat..... bush.	2,194,789	2,432,377

With the view of showing to some extent the value of the produce annually received at this port, we have compiled the annexed table, which exhibits the aggregate amount and estimated value of thirty of the leading articles of produce during the year 1848. The average rate we have in all instances placed at the lowest estimate,

wishing rather to be below than above the proper value of all the articles mentioned. The figures, however, are before the reader, and he can judge and think for himself:—

ESTIMATED VALUE OF THIRTY OF THE LEADING ARTICLES OF PRODUCE RECEIVED AT THE PORT OF ST. LOUIS FROM THE 1ST OF JANUARY TO THE 31ST OF DECEMBER, 1848.

Articles.	Aggregate amount.	Average rate.	Estimated value.
Tobacco, leaf.....hhds.	9,044	\$45 00 per hhd.	\$406,980 00
" manufactured boxes	5,446	13 20 per box.	71,897 00
Hemp.....tons	9,454	85 00 per ton.	802,590 00
Lead.....	24,200	74 00 "	1,790,800 00
Flour.....bbls.	287,684	4 25 per bbl.	1,637,232 00
Wheat.....bush.	2,194,789	70 per bush.	1,526,352 30
Corn.....	699,693	28 "	195,914 04
Oats.....	243,700	21 "	51,177 00
Barley.....	111,003	38 "	42,181 14
Rye.....	9,075	35 "	3,176 25
Beans.....	14,196	40 "	5,678 40
Beef.....trcs.	9,369	8 50 per trc.	79,636 50
".....bbls.	7,866	6 50 per bbl.	51,129 00
".....half bbls.	87	3 28 per half bbl.	282 75
Pork.....trcs.	1,074	10 00 per trc.	10,740 00
".....bbls.	96,618	7 50 per bbl.	724,635 00
".....half bbls.	1,923	3 75 per half bbl.	7,136 25
" in bulk.....lbs.	8,454,000	2½ per lb.	211,250 00
Lard.....trcs.	6,579	17 50 per trc.	115,132 50
".....bbls.	67,329	13 50 per bbl.	908,941 50
".....kegs	14,180	3 50 per keg.	49,630 00
Bacon.....casks	25,820	28 00 per cask.	722,960 00
".....hhds.	3,803	38 50 per hhd.	138,515 50
".....bbls.	2,847	7 00 per bbl.	19,939 00
".....boxes	3,775	14 00 per box.	52,858 00
Whiskey.....bbls.	29,758	6 80 per bbl.	201,454 40
Tallow.....lbs.	483,920	6½ per lb.	31,454 80
Butter.....	1,105,240	9 "	99,561 60
Bale rope.....coils	12,633	7 25 per coil.	91,589 25
Bagging.....pieces	1,084	14 00 per piece.	15,176 00
Potatoes.....bush.	157,697	30 per bush.	47,309 10
Onions.....	22,481	35 "	7,868 35
Grease.....lbs.	201,350	3½ per lb.	7,092 25
Hides, green.....No.	10,458	1 50 each.	15,687 00
" dry.....	51,639	1 62 "	82,655 18
Hay.....tons	845	12 00 per ton.	10,144 00
Flaxseed.....bush.	32,460	80 per bush.	25,968 00
Feathers.....lbs.	51,360	20 per lb.	10,272 00
Brooms.....doz.	6,713	1 25 per doz.	8,391 25
Dried fruit.....bush.	47,605	85 per bush.	40,464 25
Green fruit.....bbls.	12,628	1 50 per bbl.	18,792 00
Wool.....bales	904	22 50 per bale.	20,330 00

Total estimated value.....\$10,358,944 54

Our import tables show the reception of at least twenty articles of produce not enumerated in this calculation, and whose aggregate value we should place at *near three millions*, thereby making, according to the best information we have upon the subject, the entire produce trade of this city, during the year 1848, worth, at the lowest possible estimate, *thirteen millions of dollars*.

VALUE OF FOREIGN MERCHANDISE IMPORTED INTO ST. LOUIS DURING THE YEAR 1848, AND ENTERED IMMEDIATELY FOR CONSUMPTION.

From England.....	\$77,742 00
" Germany.....	18,482 00
" France.....	5,397 00
" Spain.....	4,197 00
Total.....	\$107,818 00

Paying duty to the United States of \$32,086 57.

TABLE OF MERCHANDISE IMPORTED INTO ST. LOUIS AND WAREHOUSED DURING THE YEAR 1848.

Articles.	Value.	Rate of duty, per cent.	Duties.
Brandy.....	\$6,694	100	\$6,694 00
Champagne wine.....	690	40	276 00
Havana sugar.....	9,928	30	2,978 00
Earthenware.....	5,120	30	1,536 00
Hardware.....	14,498	30	4,349 40
Total.....	\$36,930		\$15,838 40

Value of merchandise withdrawn from warehouse and entered for consumption, and of merchandise imported and entered immediately for consumption during the year 1848..... \$180,844 90

Amount of duties collected for 1848..... 40,964 87

Amount collected from steamboats as hospital dues for year 1848.... 2,627 28

Amount expended from same fund, for and on account of sick and disabled seamen..... 2,500 00

From the above, nothing like a correct estimate can be formed of the amount of our foreign importations. This statement merely gives the value of such articles as have entered, and the duties paid, at the custom-house in St. Louis. A very large portion, say at least three-fourths of the entire importations direct from foreign countries to that city, are entered at New Orleans or the Atlantic ports, and the duties levied. Consequently, no account is made of them upon their arrival at the port of St. Louis. The total amount of custom-house dues collected during the year 1847, amounted to over \$70,000; for the past year they have fallen off nearly 50 per cent, and amount, as will be seen by the table above, to \$40,964 87. This deficit is accounted for by the fact that the importations of foreign sugars and syrups have been a great deal less the past than during the preceding year. Heretofore they were among the most articles imported, but the West India crops last season proving deficient in quantity, as well as in quantity, importations from that quarter measurably ceased, and manufacturers and importers of St. Louis resorted to the production of Louisiana and other Southern States to furnish the necessary supplies. The entire importation of foreign goods, wares, and merchandise, into the city during the past year, is variously estimated, from one to two millions of dollars.

For the year 1847, the duty arising from the article of sugar imported into St. Louis, amounted to..... \$38,914 80

And on brandies, hardware, queensware, &c..... 33,493 06

Total.....	\$72,407 86
And for 1848, the duty received upon brandies, hardware, queensware, &c.,	
Amount.....	\$40,964 87
For the same articles in 1847.....	33,493 06

Showing a decrease upon these articles of..... \$7,471 81

The amount of duty paid on sugar imported from Havana in the year 1848 was very inconsiderable, (some \$800;) the failure of the crop, and consequent high price of the article in Cuba, not justifying purchases in that quarter. The sugar refinery in St. Louis, paying into the treasury \$38,914 80 in 1847, as we have stated, paid only \$800 in 1848. Upon the other articles of importation, there is an increase of duty amounting to over \$7,000.

NEW YORK AUCTION DUTIES.

The system of collecting duties on goods sold at auction in New York has been in operation since 1784, when a duty of 2½ per cent was levied. In 1801, a law was passed, making a discrimination between sales in the city of New York and the rest of the State. By this act, goods sold in the city of New York paid 3 per cent duty, in any other part of the State, 2½ per cent. In 1813, a further discrimination took place. Goods from the East Indies, or produced in the United States, paid a duty of 1½ per cent; from the West Indies, including all wines, 2 per cent; and all other

goods, 8 per cent in New York city, and 2 per cent in any other part of the State. In 1817, auctioneers, who before had been *licensed*, were required to be *appointed*, and the duties were again modified. On wines and ardent spirits, 2 per cent; East India goods, 1 per cent; and on all other goods, 1½ per cent. These duties were substantially the same by the act of 1827, second session; but in 1846, they were reduced on all East India goods to one-half of 1 per cent; on all other foreign goods, to three-quarters of 1 per cent; and on all wines and ardent spirits, to 1 per cent. And in 1847, an act was passed to prevent fraudulent sales in the city of New York, imposing a duty of 5 per cent on all goods struck off to the owner, or for his benefit.

Auctioneers continued to be appointed by the Governor and Senate from 1817 to 1838, when, by an act of the Legislature, the privilege was extended to every person giving the requisite bond to the people of the State to pay the duties, and depositing the same with the Comptroller.

This is a brief history of the legislation of New York on the subject of auctions, as we find it in the last annual report of the Comptroller. There is undoubtedly much reason to apprehend that frauds are still committed upon the revenue. To enable the Legislature to judge of this, Mr. Fillmore, the Comptroller, has prepared the following tabular statement, showing the amount of duties collected in each year from 1797 to 1848, inclusive, being fifty-one years:—

STATEMENT OF THE AMOUNT OF AUCTION DUTIES PAID INTO THE TREASURY IN EACH YEAR FROM 1798 TO 1848, INCLUSIVE.

Years.	Amount.	Years.	Amount.	Years.	Amount.
1798.....	\$18,085 89	1816.....	\$159,450 01	1834.....	\$205,237 04
1799.....	47,905 94	1817.....	203,449 27	1835.....	244,537 24
1800.....	57,942 74	1818.....	179,967 14	1836.....	274,908 81
1801.....	78,783 70	1819.....	144,444 18	1837.....	214,458 63
1802.....	66,030 24	1820.....	156,477 20	1838.....	142,102 36
1803.....	52,776 14	1821.....	152,778 02	1839.....	225,401 84
1804.....	56,822 69	1822.....	181,967 65	1840.....	164,521 39
1805.....	47,614 44	1823.....	209,631 16	1841.....	206,702 11
1806.....	64,879 04	1824.....	233,101 53	1842.....	200,234 52
1807.....	73,621 80	1825.....	286,952 38	1843.....	161,123 02
1808.....	66,474 99	1826.....	234,237 84	1844.....	174,749 36
1809.....	89,636 08	1827.....	298,289 65	1845.....	176,196 63
1810.....	127,774 01	1828.....	257,187 40	1846.....	139,212 22
1811.....	107,439 32	1829.....	242,552 54	1847.....	87,932 17
1812.....	126,962 80	1830.....	218,513 66	1848.....	103,901 35
1813.....	163,122 18	1831.....	178,176 66		
1814.....	86,067 76	1832.....	250,424 02	Total.	\$8,045,197 14
1815.....	194,475 23	1833.....	212,014 23		
For 10 years, 1829 to 1838, inclusive.....					\$2,153,120 17
“ 1839 to 1848, “					1,640,226 59
Decrease 10 years.....					\$542,893 58

From this table it will be seen that the duties of 1848 were \$103,901 35, and the average amount for the whole fifty years previous, that is, from 1798 to 1847, inclusive, was \$158,825 91; that during the last ten years there had been a falling off of more than half a million of dollars from the ten years preceding. With an increasing population and an increasing commerce, it is incredible that there should be a decrease of sales by auction. The conclusion is inevitable that either auctioneers do not make true returns, or persons not authorized to sell exercise the privilege without contributing to the revenue. Mr. Fillmore suggests, as some protection to the State, and, indeed, as a matter of duty to the honest auctioneer who pays his duties, that no man be permitted to act as auctioneer unless the county judge certify that he has satisfactory evidence that the person is of good moral character.

JOURNAL OF BANKING, CURRENCY, AND FINANCE.

DEBT AND REVENUE OF THE UNITED STATES.

WE published in the *Merchants' Magazine* for November, 1848, (vol. xix., No. 5,) an interesting financial statement, as made up and certified by the Register of the United States Treasury. That table has been appended to the last Annual Report of ROBERT J. WALKER, the Secretary of the Treasury, made to the House of Representatives December 11th, 1848. It shows our population* from 1790 to the present period, every year; our debt; our receipts from loans and treasury notes; our revenue each year, exclusive of loans and treasury notes, as well as from these loans and notes; and the principal and interest of debt paid each year, as well as the total amount. It is an official record which every American may read with pride and satisfaction. It shows that whenever it was necessary to pay the debts and sustain the honor of the country, the people cheerfully submitted not merely to duties on imports, but to direct taxes and excises to the amount of many millions of dollars every year; and that, even when our population was sparse and our moneyed resources extremely limited, the debts of the country were always punctually discharged after the adoption of the Constitution, both principal and interest, at their maturity.

In 1790 the United States assumed the debt of the Revolution, determined that the honor of the nation should be preserved stainless and unsullied. That debt, then assumed, was \$75,463,476 52—being equal to a debt at this date of more than \$377,000,000, according to population, and nearly six times greater, according to population, than our present debt. At that date the country, exhausted by a seven years' war, and weakened by internal difficulties growing out of the feeble character of the old confederation, had scarcely commenced her onward career to greatness, wealth, and power; yet this debt was voluntarily assumed as a matter of honor, and it was paid, including principal and interest, punctually, without failure or suspension.

Again, at the close of the war of 1812, our debt in 1816 was \$127,334,933 74—a portion of it bearing an interest of 7 per cent; yet that debt, also, was not only fully paid in 1836, both principal and interest, but the government, after liquidating all its engagements, had a surplus left in the treasury of \$28,101,644 91; which was deposited with the States for safe keeping, who may be called upon to return it to the government of the Union should the emergency ever require its use, which is most improbable. At that date the country had been exhausted by a prolonged and severe struggle with the greatest power of the world, and its commerce almost annihilated by blockades and embargoes. Its population, then, was 8,678,000; and consequently, according to population, the debt of that date would be equivalent to a debt at the present period of upwards of three hundred and eight millions of dollars, or nearly five times as great as our present debt. Yet the debt of 1816 was not only punctually paid within twenty years thereafter, but a surplus, as we have seen, of more than twenty-eight millions of dollars deposited with the States. If, then, in twenty years, under such circumstances, and with such a population and such resources, we could pay a debt of that magnitude and have a surplus of twenty-eight millions, within how short a period may we liquidate our present engagements? By reference to the table in the November number of the *Merchants' Magazine*, it will be seen that from 1790 to the present period, including the reimbursements of treasury notes, we have paid

* Report of the Secretary of the Treasury.

a public debt, including interest, amounting to a totality of upwards of \$500,000,000. By reference to the same table it appears that our revenue, during the same period, derived from resources other than loans or treasury notes, was upwards of \$1,136,000,000.

THE TWO SYSTEMS OF BANKING IN NEW YORK.

The Comptroller of the State, in his Annual Report made to the Legislature January 4, 1849, gives a comprehensive sketch of the history and character of the two systems of banking in this State, known as the "*Safety Fund System*" and the "*Free Bank System*." Although the systems are pretty well understood by the citizens of New York, the account given below may not be entirely without interest to many of our readers in more distant parts of the country:—

There are now two systems of banking carried on in this State. One called the *Safety Fund System*, which was first authorized in 1829. Every bank belonging to this system has received a special act of incorporation from the Legislature. These charters were for a limited period, generally having about twenty years to run. There are seventy-eight of these banks and two branches now in operation, with an aggregate capital of \$29,638,860. The charters of some of them will expire in each year until 1866, when the last will terminate.*

This system was regulated by a general law, (L. of 1829, ch. 94,) which was incorporated into every charter, by which each bank was required to have all its capital paid in before it commenced business, and it was also required annually to contribute one-half of 1 per cent upon its capital to a common fund, deposited with the State Treasurer until such fund should amount to 3 per cent upon the capital of each bank, which fund was denominated the "*Bank Fund*," and was to be applied to the payment of the debts of any insolvent bank contributing to the same, and in case the fund was at any time diminished by payments from it, the banks were again required to make their annual contributions, till each had in deposit the 3 per cent on its capital stock. This fund, in common parlance, has been called the "*Safety Fund*," which has finally given name to the system. Another feature of this system was, that three bank commissioners were to be appointed, with large powers, to supervise and inspect the several banks: the State, as representing the whole people, and the banks of a certain district, which included the city banks, and the banks of another district, which included all the other country banks, each presumed to have antagonistic interests, were to be represented in this commission. It was supposed that each would be a check upon the other. To effect this, the Governor and Senate were to appoint one commissioner, and the banks in the southern part of the State another, and the remaining banks a third. Whether this mode of appointment was found not to answer the expectations of the original projectors, or the dominant party desired to use this power as a political engine, is unknown to the Comptroller; but the law was changed in 1837, (ch. 74,) so as to give the appointment of all three to the Governor and Senate.

This, of course, brought them within the vortex of the great political whirlpool of the State; and the place was sought for and conferred upon partizan aspirants, without due regard in all cases to their qualifications to discharge the delicate trust committed to them. This state of things, under the administration of both the great political parties of the State, continued until 1843, when the Legislature abolished the office, and conferred the power of examining these banks upon this department, whenever there was reason to suspect that a bank had made an incorrect report, or was in an unsafe or unsound condition to do banking business.

THE FREE BANK SYSTEM, as it is styled, was established in 1838, (ch. 260.) By this system every individual and association was authorized to engage in the business of banking, and on depositing with the Comptroller the stocks of the United States, or of any State which should be, or be made equal to a 5 per cent stock, or such stocks and bonds and mortgages to the same amount or less, on improved, productive, and unincumbered real estate, worth double the amount secured by the mortgage, over and above all buildings thereon, and bearing an interest of at least 6 per cent per annum, the Comptroller was required to deliver to such individual or association an equal

* This statement includes two incorporated banks not subject to the Safety Fund act, whose charters are unlimited, namely, the Manhattan Company and the New York Dry Dock Company. Their aggregate capital is \$2,250,000.

EXCHANGE BETWEEN ENGLAND AND THE UNITED STATES.

	Jan'y.	Feb'y.	March.	April.	May.	June.	July.	Aug't.	Sept'r.	Oct'r.	Nov'r.	Dec'r.
12	14	13	13	12	8	10	10	11	12	13	12	12
13	17	11	3	4	5	5	5	7	6	7	7	9
7	10	8	9	8	5	5	8	9	9	10	9	8
8	8	8	7	10	10	10	10	10	10	10	11	11
11	10	10	10	10	10	11	10	10	11	11	11	11
8	8	8	8	9	9	9	9	9	9	9	9	9
9	8	8	8	8	7	7	6	6	6	6	7	6
6	6	6	7	9	7	7	10	10	10	10	10	10
10	9	9	9	10	10	9	9	7	8	8	8	8
8	8	8	8	8	8	8	8	8	8	7	7	5
2	9	9	1	2	2	2	2	5	6	7	7	6
7	7	7	8	8	9	9	9	9	9	9	9	9
7	10	9	7	7	7	7	7	7	7	8	8	9
7	9	8	11	11	11	13	18	19	21	14	16	14
9	9	7	4	4	6	8	8	7	9	9	9	10
9	9	8	9	8	8	9	9	9	9	10	9	9
8	8	8	7	7	7	7	7	7	7	8	8	8
8	8	8	8	7	7	8	8	8	9	9	10	9
8	8	8	6	6	7	8	8	7	7	8	6	6
5	5	6	5	5	7	8	8	9	9	9	8	8
8	8	9	8	8	8	8	9	9	9	10	10	10
10	10	9	9	9	9	9	10	10	9	9	9	8
8	8	8	10	10	10	8	8	8	9	9	6	6
5	6	5	4	4	6	7	6	7	7	9	10	10
10	10	10	10	10	10	10	10	9	9	9	8	8

• *Merchants' Magazine* for March, 1849, we gave a condensed statement of the
of acres of land assessed and taxed, the value of the real and personal estate,
amount of State, county, and town taxes, with the total taxation of the State
. We now subjoin, from the Report of the Comptroller, a similar but more
te statement, specifying each county, as follows:—

STATEMENT OF THE AGGREGATE VALUATIONS OF REAL AND PERSONAL ESTATE IN THE SEVERAL COUNTIES OF THE STATE; THE NUMBER OF ACRES OF LAND ASSESSED IN EACH COUNTY; THE AMOUNT OF TOWN, COUNTY, AND STATE TAXES; AND THE RATE OF TAXATION ON EACH DOLLAR OF CORRECTED AGGREGATE VALUATIONS FOR THE YEAR 1848.

COUNTIES.	Acres of land taxed.	Assess'd value of real estate.	Assess'd value of personal estate.	Correct'd aggregate valuations.	Am't of State and County taxes.	Am't of town taxes.	Total taxation.	Rate of taxes on \$1 value.
	Acres.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Mills.
Albany.....	316,152	12,229,563	3,604,195	16,299,936	99,000 00	191,944 30	290,944 30	17.8
Allagany.....	662,614	3,497,128	162,195	3,659,303	12,968 90	19,713 31	31,682 41	8.7
Broome.....	494,370	1,856,378	910,398	2,066,676	11,673 95	7,971 74	19,645 69	9.5
Cattaraugus..	801,413	3,418,442	994,641	3,642,463	11,932 98	17,735 64	29,668 62	8.1
Cayuga.....	409,994	8,990,781	1,611,763	10,533,516	31,600 52	13,774 68	45,375 20	4.3
Chautauque..	646,960	4,455,749	614,296	5,053,667	15,998 81	18,792 03	34,618 84	6.8
Chemung.....	302,344	2,467,543	439,064	2,907,196	10,761 28	7,525 10	18,286 38	6.3
Chenango.....	540,759	3,791,154	516,650	4,297,813	12,033 99	15,465 47	27,499 36	6.4
Clinton.....	615,419	1,664,360	78,742	1,743,131	11,506 32	14,502 18	26,008 36	4.8
Columbia.....	377,300	9,792,937	2,788,537	9,272,541	36,230 25	16,891 92	53,121 17	5.7
Cortland.....	299,473	2,029,828	192,818	2,222,646	9,599 98	7,309 77	16,909 03	7.8
Delaware.....	4974,062	3,035,392	640,491	3,684,873	10,337 92	11,171 06	21,508 98	5.3
Dutchess.....	461,697	14,394,384	4,800,745	19,195,099	53,990 50	25,455 46	79,445 96	4.8
Erie.....	612,066	13,696,147	1,374,561	15,090,723	69,401 61	24,574 04	93,975 65	6.2
Essex.....	1,009,157	1,416,872	176,465	1,593,337	10,396 67	13,473 32	23,870 19	14.9
Franklin.....	1,015,433	1,574,700	192,119	1,766,819	5,476 81	9,968 96	14,735 69	8.4
Fulton.....	315,066	1,906,008	235,343	1,443,351	6,164 41	10,729 81	16,894 22	11.0
Genesee.....	315,560	5,466,992	668,250	6,136,640	11,490 54	13,919 98	25,390 52	4.1
Greene.....	375,891	2,311,305	714,544	3,025,749	13,392 85	14,859 58	28,252 43	9.3
Hamilton.....	741,115	301,923	875	302,798	1,691 95	4,319 31	6,001 26	29.0
Herkimer.....	784,097	5,291,996	945,614	6,237,655	24,450 05	18,818 90	43,268 95	6.9
Jefferson.....	733,567	6,153,035	1,060,601	7,213,636	23,290 13	26,830 66	49,120 79	7.2
Kings.....	420,572	33,772,583	4,519,842	38,292,425	110,331 21	223,438 90	333,770 20	7.7
Lewis.....	735,968	1,474,892	143,580	1,618,000	8,067 52	10,157 79	18,225 31	11.3
Livingston.....	357,362	9,066,671	1,194,929	10,191,600	12,990 00	16,744 44	29,034 44	2.8
Madison.....	369,544	5,968,937	833,551	6,702,488	22,118 14	11,998 81	34,106 95	4.9
Monroe.....	301,621	13,131,946	1,637,794	14,769,740	59,250 57	26,637 00	85,887 57	5.5
Montgomery..	227,152	3,135,754	409,644	3,545,398	18,985 60	16,037 75	35,023 35	9.9
New York.....	11,774	193,028,076	61,164,451	254,192,527	2,715,510 25	+	2,715,510 25	20.7
Niagara.....	314,532	4,810,855	336,368	5,149,223	14,731 65	12,354 06	27,085 71	5.2
Oneida.....	792,916	9,754,196	2,692,447	12,446,643	46,864 11	30,545 05	77,409 16	6.2
Onondaga.....	445,000	12,167,328	2,300,513	16,806,658	38,140 94	35,252 03	73,392 97	4.4
Ontario.....	390,463	11,456,180	2,109,384	13,565,564	26,782 78	14,772 91	41,555 69	3.6
Orange.....	486,757	9,294,155	2,457,269	11,751,424	30,000 00	23,596 25	53,596 25	4.5
Orleans.....	226,606	4,525,008	442,579	4,967,587	13,639 45	12,146 97	25,786 42	5.2
Oswego.....	583,487	5,700,616	653,592	6,354,208	27,290 17	27,501 82	54,791 99	8.6
Otsego.....	601,243	4,616,585	922,814	5,539,399	15,798 06	20,946 73	36,744 81	6.6
Putnam.....	135,645	2,431,309	557,755	2,989,064	3,725 59	3,413 22	7,138 81	2.4
Queens.....	170,454	7,946,025	3,735,250	11,681,275	14,985 73	14,300 51	29,286 24	2.5
Rensselaer.....	395,778	9,972,493	4,174,083	14,046,576	40,033 04	36,752 85	76,785 89	5.4
Richmond.....	21,262	1,478,028	338,025	1,816,053	8,559 00	5,251 97	13,810 97	7.6
Rockland.....	90,990	1,948,506	557,675	2,506,181	3,001 90	5,357 76	8,358 66	3.3
St. Lawrence..	1,738,500	3,348,039	956,872	3,604,911	24,839 53	25,971 26	50,810 61	14.1
Saratoga.....	500,161	5,721,391	1,266,418	7,007,809	23,656 46	14,971 85	38,628 31	5.5
Schenectady..	115,777	2,968,180	729,084	2,997,273	10,500 00	13,305 31	23,805 31	7.9
Schoharie.....	369,012	1,598,646	264,319	1,793,587	12,405 79	14,777 05	27,182 84	15.1
Seneca.....	197,500	5,222,790	744,994	5,967,714	14,923 57	8,796 93	23,690 26	3.1
Suffolk.....	394,902	4,943,584	1,194,013	6,137,597	11,896 25	10,935 36	22,831 61	3.3
Steuben.....	689,000	6,256,894	554,790	6,811,614	16,314 61	19,725 90	36,039 61	5.2
Sullivan.....	649,057	1,145,990	198,686	1,443,978	9,175 01	7,191 85	16,366 86	11.3
Tioga.....	313,413	1,583,085	308,985	1,903,069	9,640 79	10,186 01	19,826 80	20.4
Tompkins.....	371,400	3,300,030	625,450	4,125,480	7,877 69	13,598 48	21,476 17	5.2
Ulster.....	666,378	4,427,680	821,571	5,249,251	20,694 05	22,748 54	43,442 59	10.0
Warren.....	505,632	964,067	117,437	1,081,506	6,499 90	5,336 40	11,835 30	11.0
Washington..	499,269	5,293,598	975,645	6,269,233	26,330 78	14,105 09	40,435 87	6.4
Wayne.....	356,765	6,947,495	534,725	7,138,147	15,099 29	15,745 85	30,815 04	4.2
Westchester..	280,358	11,263,589	4,040,694	15,304,283	30,246 55	35,470 85	65,717 35	4.2
Wyoming.....	367,360	4,136,104	247,995	4,384,099	12,205 07	13,821 96	26,027 03	5.9
Yates.....	207,461	3,876,043	296,009	4,172,178	9,473 90	7,436 91	16,910 81	4.3

RECAPITULATION.

Acres of land taxed.....	27,906,363	Amount of State and county taxes.....	\$1,995,72
Assessed value of real estate.....	\$526,642,853	“ town taxes.....	1,304,79
“ “ personal estate.....	125,624,853		
Corrected aggregate valuations.....	651,619,595	Total taxation of the State.....	\$3,296,46

* No returns received from these counties for 1848, and therefore taken from the last annual report.

† Acres of land not returned, and therefore taken from former reports.

‡ City covers the whole county.

FLUCTUATIONS OF THE FUNDS IN ENGLAND AND FRANCE.

LEADING STOCKS ON THE 1ST JANUARY, 1848 AND 1849, AND THEIR HIGHEST AND LOWEST PRICES DURING 1848.

	1848.	1849.	1848.	1848.
d shares.	January 1.	January 1.	Highest price.	Lowest price.
85	85	88½	90	80½
11s.	12s. prem.	42s. prem.	48s. prem.	5s. prem.
rays.				
.....	8½ dia.	8½ dia.	7½ dia.	9½ dia.
.....	7½ "	18½ "	5½ "	25 "
.....	2½ prem.	5 prem.	5½ prem.	2 prem.
.....	14 dia.	28½ dia.	13½ dia.	33½ dia.
ties.	4½ "	8½ "	3½ "	8½ "
ra.	7½ prem.	10 "	15½ prem.	24½ "
North Western.	48 "	25 prem.	54 "	1 "
.....	9 "	14 dia.	17 "	36 "
d.	½ dia.	4½ "	½ "	9 "
n.	3½ "	9½ "	1½ dia.	13½ "
ra.	9½ prem.	9½ "	14½ prem.	14½ "
rth Midland.	22½ "	4 prem.	29 "	9 "
entral.				
l Amiens.	6 dia.	11½ dia.	5½ dia.	15½ dia.
France.	1½ prem.	4 "	2 prem.	8 "
ons.	4½ dia.	4 "	9 dia.	

the range of fluctuation in consols was full 15 per cent, being greater than any for eighteen years, while it also considerably exceeded the range of the respective years of the declaration of war against Great Britain by the French, the first bank suspension, 1797, the Irish rebellion, and the battle of Waterloo.

During the year 1848, it has been 10 per cent, namely, from 90 to 80, which is equal to what on the average took place on those occasions.—*London Times*, January 1, 1849.

PROPORTION OF COINAGE IN LARGE AND SMALL PIECES.

Gold coins, and the large silver coins, may be considered as international currency, liable to be carried beyond the limits of its country; while small silver coins, at home, to supply the daily traffic. It is interesting to inquire in what proportion two grand divisions of money, *large* and *small*, are coined in various parts of the world. The following will be found near the truth:—

	Considered as small coin.	Proportion in value of small coin to large.
United States	Under a half dollar.	1 to 10.6
Britain	All the silver.	1 6.6
France	Under five francs.	1 41
India	Under a thaler.	1 5.3
China	Under a rixdollar.	1 2.1

PRODUCTION OF GOLD AND SILVER MINES.

According to the amount of the production of the precious metals, M. Chevalier, one of the most distinguished statisticians in Europe, and probably the best authority in the world of any man living, if we except Baron Humboldt, gives, as the result of his calculations, the following calculation with respect to gold:—America produces 1,345,412 lbs. against 1,968,750 at the commencement of the present century. At that time the production amounted to \$22,948,800 of gold and of silver—total \$62,948,800.

At the present time, \$43,568,580 of gold and of silver—total \$82,451,980, showing a slight falling off in silver, and an increase in gold.

RAILROAD, CANAL, AND STEAMBOAT STATISTICS.

CENTRAL RAILROAD, GEORGIA.

In a former part of the present number of the *Merchants' Magazine* we have published an account of the city of Savannah, as one of our series of papers relating to the "COMMERCIAL CITIES AND TOWNS OF THE UNITED STATES," compiled from a little work prepared by JOSEPH BANCROFT, Esq., under a resolution of the City Council of Savannah, Ga. In connection with that account, it may be well to introduce in this department of our Journal the most important facts brought to light in the Fourteenth Annual Report of the "Central Railroad and Banking Company," in regard to the business of the road.

The Georgia Central Railroad extends from Savannah to Macon, Georgia, a distance of 191 miles. The following table shows the route, places, distances, and rates of fare on this road:—

Places.	Miles.	Fare.	Places.	Miles.	Fare.
Savannah .....	..	....	Holcomb	100	\$3 75
Eden	21	\$0 75	Station 11	112	4 12
Reform	80	1 12	Davisborough	122	4 50
Station 4	40	1 50	Tennille	136	4 97
Armenia	46	1 87	Oconee	147	5 25
Halcyondale	50	1 87	Emmett	152	5 69
Station 6	61	2 25	Mile station (160)	160	6 00
Scarborough	70	2 62	Gordon	170	6 37
Brinsonville	80	3 00	Larksville	180	6 75
Midville	90	3 37	Macon	191	7 00
Station 9	96	3 75			

According to the last Annual Report it appears that the total resources of the road, independent of the road and its appurtenances, amounts to \$388,922, and the total liabilities to \$359,833. From the report of the engineer and superintendent it appears that the earnings of the road for the year ending November 30th, amounted to \$516,252 64. The expenses of maintaining and working the road for the same period have been \$266,450 01, leaving a balance, as nett profits, of \$249,802 63; and an increase in the gross earnings of the road over the previous year (1847) of \$132,389 01.

The following table shows a comparison of the various branches of the business for the year just closed with the previous one:—

	1847.	1848.	Difference.
Up freight, through	\$116,400 69	\$108,211 41	\$8,189 28
“ way	80,427 04	82,825 49	2,398 45
Down freight, through	117,882 24	247,894 74	130,012 50
“ way	28,701 43	46,583 29	17,881 86
Up passage, through	24,177 02	19,854 82	4,322 20
Down “ “	19,918 49	15,968 08	3,950 41
Up “ way	13,407 05	13,534 28	127 23
Down “ “	12,944 62	13,180 53	764 09
Bales cotton, through	69,179	137,157	67,978
“ way	18,345	31,561	13,216
Total bales cotton	87,524	168,718	81,194
United States mail	20,005 00	19,200 00	805 00
Total earnings	383,863 55	516,252 64	132,389 09

The following is an abstract of the earnings of the road, from different sources, from December 1, 1847, to December 1, 1848:—

"	cost of up freight, through.....	\$108,211	41
"	" way.....	82,825	49
"	down freight, through.....	247,894	74
"	" way.....	46,583	29
"	through passage, up.....	19,854	82
"	" down.....	15,968	08
"	way passage, up.....	18,534	28
"	" down.....	12,180	53
"	carrying the United States mails....	19,200	00

Total revenue in 1848.....	\$516,252 64
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The following table exhibits the number of passengers and bales of cotton transported over the road from December 1, 1847, to December 1, 1848:—

Months.	Number of passengers.				Number of bales of cotton.		
	Through.		Way.		Through.	Way.	Total.
	Up.	Down.	Up.	Down.			
January.....	254	210	807	726	10,458	3,081	13,539
February.....	291	206	728	644	18,205	5,844	24,049
March.....	163	101	281	248	20,180	4,301	24,481
April.....	285	209	695	560	13,741	3,269	17,010
May.....	264	429	499	503	6,754	1,065	7,819
June.....	253	334	533	555	10,962	509	11,471
July.....	170	177	535	506	6,954	334	7,298
August.....	238	399	549	511	6,526	219	6,745
September.....	357	262	501	456	6,796	489	7,285
October.....	289	171	692	483	5,454	1,037	6,491
November.....	427	333	610	617	14,339	4,839	19,178
December.....	445	241	526	576	16,778	6,574	23,352

Total.....	3,436	3,072	7,004	6,385	137,157	31,561	168,718
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Decrease in up freights..... 4 per cent.

Increase in down freights.....	101	"
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Decrease in through passage.....	10½	"
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“	way passage.....	21
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Increase in total earnings.....	84½ "
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The number of tons of freight transported one mile on the road during the year is near as the superintendent can estimate from reliable data, 11,190,000, which is 1.99-100 cents per ton per mile as the cost of transportation.

number of miles run by passenger trains during the year.....	140,000
all other trains.....	208,800

Total number of miles run.....	846,800
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This gives as the cost per mile run, 76.7 cents.

from a manuscript statement, copied from the books of the company, it appears that in the 1st day of January, 1848, to the 9th day of December, 1848, there have been taken down this road 2,609 bales of yarns and cloths of cotton manufactured in Georgia.

STEAM NAVIGATION OF ST. LOUIS.

We are indebted to a correspondent at St. Louis for the "*Annual Review of the Trade and Commerce of St. Louis for the year 1846*," as compiled with great care for the *Missouri Republican* newspaper, and published in a pamphlet of eighteen closely printed pages. In the *Merchants' Magazine* for 1847, (vol. xvii., p. 168,) we published most of all the boats engaged in the trade of St. Louis during the year 1846, and their cargo, besides several other tables touching the steam navigation of that great and rapidly increasing inland city. We now subjoin, for the purpose of reference and comparison, the present condition of steam navigation at that point, condensed from

the report referred to above. The following table, compiled from the custom-house register, shows the number of steamers and barges employed in the commerce of St. Louis during the year 1848, all of which are owned or partly owned in St. Louis, and were registered as belonging to that port. This table, which gives the name of each boat and amount of custom-house tonnage, may, we are assured by the compiler, be relied upon for its entire accuracy:—

STEAMBOATS, BARGES, ETC., OWNED OR PARTLY OWNED IN ST. LOUIS, AND BELONGING TO THAT DISTRICT.

Lake of the Woods..	86	Julia.....	235	Belmont.....	145
Kit Carson.....	280	Iron City.....	118	Sam. Walker.....	127
Prairie Bird.....	213	Grand Turk.....	689	Oregon.....	173
Mary.....	319	Pekin.....	108	St. Peters.....	164
War Eagle.....	156	Time and Tide.....	161	Ohio Mail.....	118
Eudora.....	421	Dubuque.....	169	Plough Boy.....	248
Little Dove.....	77	Uncle Toby.....	110	Pride of the West...	322
Lewis F. Linn.....	162	Herald.....	163	Hannibal.....	444
Whirlwind.....	296	Convoy.....	750	Montauk.....	176
Lightfoot.....	155	Marshal Ney.....	487	St. Joseph.....	219
Algoma.....	285	Kansas.....	276	Kate Kearney.....	306
Nathan Hale.....	136	Sacramento.....	221	Fayaway.....	109
Wyandotte.....	315	Bertrand.....	148	Old Hickory.....	446
General Brooke.....	144	Ne Plus Ultra.....	248	Oella.....	77
Balloon.....	155	Martha.....	180	Autocrat.....	847
Boona Vista.....	267	Tempest.....	211	Tamerlane.....	123
North Alabama.....	177	Die Vernon.....	212	Whirlwind.....	226
Mustang.....	129	Fortune.....	101	Odd Fellow.....	96
Haidee.....	145	Anthony Wayne.....	164	Alexander Hamilton.	191
St. Louis.....	887	White Cloud.....	262	Alton.....	344
Edward Bates.....	300	Missouri.....	886	General Jessup.....	275
Eliza Stewart.....	170	St. Paul.....	359	Eureka.....	113
Dial.....	139	Red Wing.....	143	Kentucky.....	135
Clermont.....	112	Luella.....	146	Alice.....	233
Lucy Bertram.....	268	Illinois.....	579	Alph. De Lamartine.	537
Boreas No. 3.....	249	Planter.....	199	Mameluke.....	570
Dr. Franklin.....	149	Cumberland Valley..	168	Avalanche.....	220
Domain.....	132	Beardstown.....	77	Companion.....	164
Aleck Scott.....	710	Pearl.....	64	Frolic.....	126
St. Croix.....	159	St. Louis Oak.....	109	Alvarado.....	124
Iroquois.....	485	Senator.....	121	Newton Waggoner..	106
Mondiana.....	162	Brunswick.....	358	Saluda.....	223
Joshua Lawrence.	593	American Eagle.....	217	Tobacco Plant.....	297
Sultana.....	924	Timoleon.....	133	Financier.....	135
Mandan.....	204	Clermont No. 2.....	121	Daniel Hillman.....	145
Mary Blane.....	181	Ocean Wave.....	206	Laurel.....	78
Acadia.....	118	Governor Brigga.....	90	Archer.....	148
Missouri Mail.....	210	Highlander.....	346	Amaranth.....	334
Highland Mary.....	159	Governor Bent.....	190	Rowena.....	230
Iowa.....	455	Confidence.....	132	Revenue Cutter.....	100
Falcon.....	144	Amelia.....	152	Cora.....	159
Wave.....	89				

BARGES.

General Marion.....	65	Robert Burns.....	58	Kate Wilson.....	23
Ranger.....	44	James Madison.....	76	Diana.....	65
S. J. Thomas.....	73	Thomas Jefferson.....	75	Marietta.....	87
Minnesota.....	75	Alice.....	48	Augusta.....	59
Muscatine.....	74	Caroline.....	60	Little Dick.....	67
Mary Dacre.....	70	Ole Bull.....	46	Morgiana.....	69
Wilhelmina.....	67	Camel.....	36	Dubuque.....	61
Corporal Trim.....	39	Growler.....	37	Potosi.....	61
White Wing.....	89	Kate.....	54		

FERRY-BOATS.

Virginia Belle.....	132	Wagoner.....	107	St. Louis.....	210
Grampus.....	167	Illinois.....	202		

The whole amount of steamboat tonnage owned in St. Louis during the year 1848, amounted to.....	tons	35,578
Tonnage of barges.....		3,539

Total tonnage of steamboats and barges owned at this port during the year 1848.....	39,117
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STEAMBOATS BUILT IN ST. LOUIS IN 1848.

Below is a list of steamers built in St. Louis during the past year. The number, as will be seen, is quite small, less even than in 1847, which may be accounted for by the fact, that early in the spring much difficulty was experienced as to the possession of the real estate upon which several of the shipyards are located, and which led to an almost entire suspension of business, and finally resulted in one of the most extensive ship-builders quitting the city. A large number of boats have, however, been repaired at that point, and the different yards for a greater portion of the time have presented quite an active appearance. St. Louis has every facility for ship and boat-building, and during the present year a large number will, no doubt, be launched by her mechanics. It is scarcely necessary to add, that all the boats named are owned at this point:—

Mustang.....	tons	128	Plough Boy.....	tons	248
Edward Bates		300	Fayaway.....		108
Aleck Scott.....		709	Lenora.....		125
Highland Mary.....		159	Alph. De Lamartine.....		587
Iowa.....		455			
Pekin.....		108	Total tonnage.....		2,876

COMPARATIVE ARRIVALS OF STEAMBOATS AT THE PORT OF ST. LOUIS.

The following table shows the total number of steamboats arrived at St. Louis from New Orleans, Cairo, the Ohio, Upper Mississippi, Illinois, and Missouri rivers, and all other points, in each of the three last years; i. e., from 1846 to 1848, inclusive:—

	1846.	1847.	1848.		1846.	1847.	1848.
New Orleans.....	395	502	426	Missouri.....	256	314	327
Ohio, the.....	420	430	429	Cairo.....	...	146	194
Illinois.....	446	658	690	Other ports.....	282	202	396
Upper Mississippi ..	662	717	697				

A TABLE SHOWING THE MONTHLY ARRIVALS OF STEAMBOATS, BARGES, FLATS, AND KEELS, WITH THEIR RESPECTIVE TONNAGE, HARBOR MASTER'S FEES, ETC., FOR 1848.

	Arrivals of steamboats and barges.	Flats and keels.	Tonnage of steamboats and barges.	Wharfage.	Harbor master's fees.	Paid into the city treasury.
January.....	129	2	21,536	\$1,398 80	\$111 90	\$1,276 90
February.....	141	25	24,872	1,329 60	106 36	1,223 24
March.....	238	31	45,492	2,324 60	185 96	2,138 64
April.....	437	41	89,678	4,569 90	865 59	4,204 31
May.....	285	20	63,528	3,213 90	257 11	2,956 79
June.....	246	16	55,502	2,799 10	223 92	2,586 18
July.....	332	12	73,427	3,700 30	296 02	3,404 32
August.....	299	22	58,635	2,964 25	237 14	2,727 11
September ..	411	40	79,705	4,063 75	325 10	3,738 65
October.....	325	44	59,668	3,205 40	256 48	2,948 97
November...	358	60	63,121	3,275 55	262 04	3,013 51
December....	267	19	53,049	2,686 95	214 87	2,471 06
Total.....	3,468	332	688,213	\$35,531 15	\$2,842 44	\$33,688 71

THE WESTERN (MASSACHUSETTS) RAILROAD.

The Annual Report of the Directors of the Western Railroad for the financial year terminating on the 30th of November, 1848, has been published. It embraces several interesting tables relating to the amount of business, travel, receipts, and expenditures for a series of years, which we proceed to lay before our readers in a condensed form.

The following table shows the entire amount of income from all sources since the road was first opened, and the gain of each year over the preceding one, omitting the fractions of a dollar, or cents:—

THE AMOUNT RECEIVED FROM ALL SOURCES SINCE THE ROAD WAS OPENED.

Years.	Passengers.	Merch'ce.	Mails, &c.	Total.	Expenses.	Bal. receipts.	Miles run.
1839*.....	\$13,472	\$4,136	.....	\$17,609	\$14,380	\$3,228	....
1840.....	70,820	38,359	\$3,166	112,347	62,071	50,275	94,405
1841.....	113,841	64,467	4,000	182,308	132,501	49,807	160,105
1842†.....	266,446	226,674	19,556	512,688	266,619	246,068	397,295
1843.....	275,139	275,696	23,046	573,882	303,973	269,909	441,608‡
1844.....	358,694	371,131	23,926	753,752	314,074	439,688	499,968
1845.....	366,753	420,717	26,009	813,480	370,621	442,858	530,201
1846§.....	389,861	459,365	29,191	878,417	412,679	465,738	573,956
1847.....	502,321	785,345	37,668	1,325,336	676,689	648,646	819,010
1848.....	551,038	745,909	85,120	1,382,068	652,357	679,711	805,493

The next table gives the number of through and local passengers for each year since the road was opened, and shows a slight falling off of through passengers for the last year compared with those of the previous year, while the local have greatly increased:

Years.	Through passengers.			Way passengers.			Total.		Grand total.
	1st class.	2d class.	Total.	1st class.	2d class.	Total.	1st class.	2d class.	
1842	15,890	2,681	18,571	148,500	23,866	171,866	164,390	26,046	190,436
1843	19,987	6,608	26,595	140,425	33,945	174,370	160,412	40,553	200,965
1844	17,016	7,314	24,330	140,869	55,058	195,927	157,885	62,372	220,257
1845	13,402	5,791	19,192	144,723	59,717	204,442	158,124	65,508	223,633
1846§	21,033	8,799	29,833	165,196	70,637	235,831	186,229	79,435	265,664
1847	23,678	10,622	34,299	264,444	89,667	354,011	288,122	100,188	388,311
1848	21,647	12,084	33,731	287,480	84,403	371,883	309,129	96,487	405,616

132,653 53,899 186,553 1,291,638 416,693 1,709,332 1,424,291 470,592 1,894,894

The following table gives the total amounts expended for the construction and equipment of the road:—

TABLE SHOWING THE COST OF THE WESTERN AND ALBANY AND WEST STOCKBRIDGE RAILROADS TO NOVEMBER 30, 1848.

	Total amount paid.		Total cost of both roads.
	Western Railroad.	Alb'y & W. Stockb'ge Railroad.	
Graduation and masonry.....	\$3,453,511 17		\$4,578,047 16
Bridging	229,745 89	\$894,790 10	
Superstructure, including iron..	1,559,141 23	298,452 63	1,857,593 86
Station buildings and fixtures..	320,456 55	289,179 56	609,636 11
Land, land damage and fencing	293,180 91	210,122 98	503,303 90
Locomotives.....	672,739 28	.....	672,739 28
Passenger and baggage cars...	73,544 55	.....	73,544 55
Merchandise cars.....	532,026 17	.....	532,026 17
Engineering and other expenses	841,107 34	232,156 40	1,073,273 74
Total.....	\$7,975,452 09	\$1,924,701 57	\$9,900,153 76

Since last report the capital stock has been increased by creating 11,500 shares, which have been disposed of according to law.

* Three months. † First year of opening through to Albany. ‡ Eleven months. § Eleven months.

total means provided for construction and equipment of the road, and for payments into the Sinking Funds, have been 51,500 shares of the capital stock, which, at 100 each, amount to.....	\$5,150,000 00
9,900 sterling bonds, payable, with interest at 5 per cent, in London, at not less than 8 per cent advance.....	4,319,520 00
any city bonds, interest at 6 per cent.....	1,000,000 00
Total means provided.....	\$10,469,520 00
amount paid Albany Sinking Fund.....	\$100,000 00
" Massachusetts Sinking Fund.....	146,467 53
" the Sinking Funds from proceeds of shares to January 1, 1848.....	213,111 10
	459,578 62
total means for construction and equipment of road.....	\$10,009,951 38
total cost of road and equipment, as per table annexed.....	9,900,153 76
	\$109,787 62

The number of shares issued by the corporation is 51,500—of which the Commonwealth holds 11,004; the Massachusetts Sinking Fund, 210; Massachusetts School Fund, 550; and corporations and individuals, 39,736. Of these, from 1 to 10 shares held by 1,953 individuals; from 11 to 20 shares by 412; from 21 to 30 by 166; from 31 to 50 by 113; from 50 to 100 by 94; and over 100 shares by 42 individuals, thereby indicating that a large portion of the stock is held as a permanent investment.

TOLLS RECEIVED ON THE NEW YORK STATE CANALS.

The following table shows the aggregate amount received for tolls, &c., on all the canals from the year 1824 to 1848, inclusive, also the yearly receipts from 1837:

Amount collected from 1824 to 1838.....	\$14,960,709 18
" " in 1838.....	1,590,911 07
" " 1839.....	1,616,382 02
" " 1840.....	1,775,747 57
" " 1841.....	2,034,882 82
" " 1842.....	1,749,197 52
" " 1843.....	2,081,590 17
" " 1844.....	2,446,374 52
" " 1845.....	2,646,181 87
" " 1846.....	2,756,120 89
" " 1847.....	3,635,380 00
" " 1848.....	3,252,367 34
Total.....	\$40,545,844 97

From the foregoing table it will be seen that there has been a falling off in the amount received for tolls on all the canals in the State last year compared with 1847. The total decrease amounts to \$383,012 66. But this is a much smaller sum than was looked for some three months before the canals closed.

It was expected that the aggregate amount of tolls would fall short of three millions, while in fact it exceeds that amount some \$250,000.

The aggregate amount of tolls received at tide-water during 1848, show an increase of \$46,457 73. Several of the western offices make equally favorable reports. The increase at Brockport is \$25,157 57; Lockport, \$53,659 10; and Black River, \$126,519 51. At Buffalo the decrease has been very large, being a much larger amount than the total deficiency on all the canals; the difference in the receipts at that office between 1847 and 1848 amounts to \$544,082 87. The falling off at Oswego is very small comparatively speaking, amounting to only \$1,043 04.

JOURNAL OF MINING AND MANUFACTURES.

SILVER MINES AND MINING IN SPAIN.

A CORRESPONDENT of the London *Mining Journal* furnishes the following interesting details, drawn from authentic documents, of the mines Santa Cecilia and Suerte, the most celebrated in that locality:—

SANTA CECILIA. This mine, situated between those of Suerte and Fortuna, is the one in which the lode was first encountered, and which branches off to the other two, and no doubt will, when more developed, lead to further and more important discoveries. The lode is composed of barytes, which appear intermingled with different varieties of silver and iron ore, and has generally an extent of from one to three feet. A shaft has been sunk on the lode to a depth of 78 varas, in addition to which there are three shafts of a smaller depth. The first level is about 29 varas from the surface; the middle is 16 varas below the above, consequently, 45 below the surface; and two are driven at the bottom of the shaft; the longitudinal extension of the set is 200 varas. Up to the present date, there has been extracted from this mine 47,000 quintals of mineral, which contains each, on an average, $2\frac{1}{2}$ ounces of silver—this has been principally obtained from the upper level. It is calculated that from this part of the mine there can be produced 100,000 quintals, of a greater average than $2\frac{1}{2}$ ounces of silver; from the middle level 80,000 quintals, and when the levels are opened at the depth of the 77 varas, 120,000 quintals—making a total of 300,000 quintals. This could be extracted in the three succeeding years, at an average of 84,000 quintals annually; the presumed cost of the production of each quintal will be ten reals. On comparing this with the value of the mineral that has already been sold, it appears that, during the three years, the gross proceeds can annually be made 2,940,000 reals, and a probability of the workings being extended deeper. The composition of the mineral, when divided into five classes for the refinery, is the following:—8 quintals green silver; 18 minerals of first class; 240 of second; 120 earths of first class; 614 of second class—1,000. The quantity of mineral sent to the works for refining, during the year 1847, was as follows:—

294	quintals	17	pounds	green silver.	
708	"	95	"	minerals of the first class.	
4,274	"	22	"	" second "	
881	"	16	"	earths of the first "	
228	"	46	"	" second "	
6,886				95—Total value, 574,404 reals 23 maravedes.	

The directors of this mine have declared a dividend to the adventurers of 500 reals a share, the present cost of which is 200,000 reals paid up.

SUERTE. This mine is situated to the east of the former, and on the same vein; it has a shaft of 44 varas in depth, of which only 18 have been driven on the lode, a slide having intervened, which has heaved the lode about 10 varas in a northerly direction. Another shaft has been driven to intersect the lode at this point; this has been sunk a depth of 88 varas from the surface; on this two levels have been driven—the first, which is now in length 47 varas, is 39 varas from the surface; and one below, at a distance of $8\frac{1}{2}$ varas, has been prosecuted to the length of 50 varas. In the first level the lode has been discovered of an extraordinary magnitude and richness. The superintendent of the mine calculates that 60,000 quintals of mineral, containing on an average more than $2\frac{1}{2}$ ounces of silver to the quintal, can be produced in three years, at the rate of 20,000 quintals annually, and the quality of this is superior to the other mines, as the following classification of the mineral will prove:—One thousand quintals of stuff produced from this mine was composed of—green silver, 4 quintals; minerals of first class, 100; of second, 450; earths of first class, 124; of second, 323—1,000 quintals.

It has been satisfactorily proved, by the sales already made, that the value of each quintal is 90 reals, which returns a profit of 75 reals on each. The result of this will be, that the 20,000 quintals would give an annual profit of 1,500,000 reals. The

of mineral which has been sent to the refinery is the following, with its classifications :—

	22	quintals	50	pounds	green silver.	
903	"	73	"		minerals of the first class.	
1,909	"	49	"		" second "	
257	"	97	"		earths of the first "	
210	"	14	"		" second "	

3,302 83—Total value, 365,887 reals 83 maravedes.

Directors of this mine have declared a dividend of 2,000 reals a share, the press of which is 2,000 reals paid up.

THE PENNSYLVANIA COAL TRADE FOR 1849.

Following statement of the coal trade in 1849 is extracted from the *Miners'* (regarded as good authority,) published at Pottsville, Pennsylvania :—

generally conceded that there will be no overstock on the 1st of April, 1849, consequence in the market—probably not more than 50,000 or 75,000 tons; the 1st of April, 1848, the overstock was not less than 275,000 tons. The supply sent to market in 1848 was 3,089,000, to which add 200,000 tons, over the former year, (1847,) and it makes the consumption for the year ending 1849, in round numbers, 3,289,000. Add to this an increase of 150,000 tons, (a very moderate,) and the supply required for the ensuing year will be 3,439,000 tons.

quantity the Lehigh can furnish not more than.....	tons	750,000
do & Hudson.....		470,000
do, Shamokin, and Wilkesbarre.....		360,000
increase over 1848, 145,000 tons.....		1,580,000
for the Schuylkill region to furnish....		1,859,000
total.....		3,439,000

An increase of about 208,000 tons over the supply furnished last year.

The supply this year falls short of the quantity sent for the same period last year about 25,000 tons; and when we take into consideration the disastrous state of the year, which not only checked all new improvements in the coal regions, but all preparations during the winter for this year's business, and the fact that the company have not added any increased facilities to their establishment for their coal to market this year, we have every reason to believe that it will be collieries busy to mine, and the railroad and canal (with the present facilities) employed to carry the necessary quantity required to market. The present rates of freight and toll, red ash coal ought not to be sold on board railroad for less than \$4 per ton, and white ash at \$3 75. This would give the mine here about \$2 12 for red ash, and \$1 87 for white ash, which in all conscience is enough.

MANUFACTURE OF TOBACCO IN PARAGUAY.

A well known practice of the French government to send to distant countries and commercial missionaries, who communicate on their return the results of their observations to their government. One of these gentlemen, a Mr. Alfred Demer, recently made a report on the subject of the cultivation and manufacture of tobacco in the South American Republic of Paraguay. Some of the facts relating to the tobacco possess interest for the American merchant.

Travelers who have at distant intervals visited Paraguay, are unanimous in their expressions of the tobacco in that part of America. They do not hesitate to say that, in every desirable quality, it is equal to the tobacco of the Island of Cuba; and connoisseurs go so far as to say that it is to be preferred to the finest Havana. It has a more aromatic bouquet, which never becomes disagreeable, even when it is pressed against the clothes of the consumer. The bad qualities of this tobacco are not from nature, but from the absence of care in its cultivation and manufacture.

The natives make it a point to retain the best qualities for their own use, and consequently the cigars sold in the frontier towns, for foreign consumption, are very inferior. In private houses, where their preparation forms a part of the duty of the young girls of the family, they are found of superior excellence. Brazilian traders, by exercising unremitting watchfulness over their workmen, succeed in producing cigars that will sell in their own market; but, with all their care, these cigars remain still inferior to the pure Havanas. When Havana tobacco of a certain quality is worth \$10 in Rio, Paraguay tobacco of the same quality will be worth \$6, Brazilian \$3, and Virginia \$2. The best qualities come from the department of Villa Rica, and from the districts of Itagua and of Piragu, lying near Assumption, and extending to the foot of the Andes.

The annual production of the whole republic may be put down at 450,000 arrobas, or 9,000,000 lbs. The home consumption is enormous, being annually not less than twelve pounds a head for the whole population. Children learn to smoke before they learn to speak. The men, enervated by a burning climate, without care for the morrow, without any sufficient stimulant to exertion—the women, still more sedentary in their habits—all have recourse to the leaf, and find in it almost the sole enjoyment of their lives.

What importance the cultivation and manufacture of tobacco in Paraguay may attain for the purposes of exportation, it is impossible to say. At present, with the mouth of the Parana closed against foreign commerce, Paraguay is nearly as isolated from the rest of the world as in the time of the Dictator Francia.

MANUFACTURES IN TENNESSEE.

A correspondent has sent us an article from the *Nashville Union*, and also a copy of a letter from SAMUEL D. MORGAN, Esq., of Nashville, who is considered the pioneer of cotton manufactures in that region. The newspaper press in the Southern and Western States, without distinction of party, is advocating the encouragement, by all practicable means, and the building up of manufactories among themselves, for the purpose of withdrawing a part of the ill-paid capital now invested in agriculture, as well as to achieve an independence of northern manufactories. Their efforts to diversify industry will, no doubt, eventually succeed. From Mr. Morgan's letter, referred to above, we learn that there are already, within the bounds of "Middle Tennessee," some twenty different mills for the manufacturing of yarns and cloths. The precise condition in Tennessee, as far as it can now be ascertained, is thus stated by Mr. Morgan:—

"From the best data I have at command, I estimate the number of spindles in operation at not less than 18 or 20,000. There are but few of these mills which as yet are making cloths, though several more, I understand, are preparing to do so. The article manufactured consists chiefly of cotton yarns, varying in sizes from number 3 or 4 to number 13 or 14. Some two or three of them manufacture a heavy article of woollen and cotton goods, used for negro clothing.

"In addition to the mills alluded to, there is now being erected, and very near its completion, another one at Lebanon, 30 miles distant from Nashville, and which is point of construction and machinery, is believed to be *fully equal to any one in America of its size*—the building all being of the best material, and on the most approved plans—fire-proof throughout. The engines for propelling it, as well as its operative machinery, embrace all the latest American and European improvements. The buildings (which are in greater part four stories high) cover an area of very nearly or quite three-fourths of an acre. When finished, it is designed to contain 6,000 cotton and 2,000 woollen spindles, and 240 looms, capable of producing from seven to eight thousand yards of cloth daily; and as the goods which it is intended to produce will be of the heaviest description, the quantity of cotton which it will require for a year's operation will be about 2,500 to 3,000 bales, with a proportionate amount of wool. So you will perceive that within a short time there will be in operation, in this division of the State, certainly not less than 25,000 spindles; and as these spindles will all be engaged in producing the very heaviest description of yarns, the entire amount of cotton required for them will not be short of 8,000 bales.

"In the eastern, and also in the western division of the State, there are many other small mills, of which I know too little to enable me to give to you, for your friend,

mination of a character sufficiently reliable to make it valuable to him. I not, however, to assert that, together, the two other divisions possess not less 600 spindles, and consequently increase the quantity of cotton manufactured to not less than 12,000 bales in all—more likely exceeding than falling under ber.”

MERCANTILE MISCELLANIES.

MERCANTILE LIBRARY ASSOCIATION OF CINCINNATI.

we have just received the Fourteenth Annual Report of the Young Men's Mercantile Association of Cincinnati, a document of some sixteen pages, presenting a clear and succinct account of the condition of that institution during the past year. It is a great pleasure to record the evidences of its continued prosperity, as united in the interesting report of its intelligent Board of Directors. The Board appear to have discharged their duty with fidelity by carrying out all those plans of improvement deemed valuable, besides introducing such improvements and reforms in the management of its business details as are calculated to perpetuate the established prosperity, and to promote the future interests of the Association. In evidence of increased interest in the institution, we learn from the report that 18 new members have been elected during the last year, the withdrawals from all amounting to 132. At the commencement of the last year the total number of members was 1,109, and at the close of the year 1,517, to which may be added 58 honorary members, comprising members of the press and the resident clergy of the city. The library accommodations have been extended by the addition of two new buildings which are nearly filled up with books. The Board appear to have made great efforts for the increase of the library. The number of volumes in the catalogue at the commencement of 1848 was 6,106; the number added during the year by purchase, 405; by donation, 636; which, with the binding of 48 periodicals and magazines, shows an increase of 2,089 volumes during a single year, at a cost of \$1,955. Editions, together with the number of volumes previously in the library, show a total of 8,195 volumes now upon the catalogue. The reading-room seems to be filled with books during the year, which is supplied with 37 daily, 3 tri-weekly, 5 semi-weekly, and 1 weekly papers—making in all 85 files. The magazine list, literary and scientific, consists of 9 quarterly, 29 monthly, 1 semi-monthly, and 1 weekly—in all forty, an increase of 17 during the year. The institution has supported a course of interesting lectures during the year, and Governor Bibb, of Ohio, delivered an able introductory lecture which we shall endeavor to notice in a future number of the *Merchants' Magazine*. The number of books drawn from the library during the year has largely increased, the average circulation per quarter being 3,700 volumes, or 1,234 volumes per

month. Total receipts into the Treasury for the year 1848 have been \$6,050 15; expenses for all purposes, \$5,785 59; leaving a balance in the Treasury of \$344 76. In connection it will not, we presume, be considered out of place to give a letter recently received from the Corresponding Secretary of this Association, and the manner in which it communicates; for the kind and flattering terms of which (all the more so because unexpected and unsolicited) we beg the officers of the Association, and the members of it individually, to accept our thanks. We are likewise duly sensible of the honor conferred by our election as an honorary member of their noble institution, for whose continued prosperity we can express no more fervent aspiration

than that its growth may be commensurate with that of the great central emporium, the future metropolis, may we not add, of the country.

ROOMS OF THE YOUNG MEN'S MERCANTILE LIBRARY ASSOCIATION, }
CINCINNATI, January, 1849. }

At a general meeting of the Association it was—

Resolved—As the sense of the Young Men's Mercantile Library Association of Cincinnati, that "*Hunt's Merchants' Magazine and Commercial Review*" has, from its commencement, filled an important and widely-extended field of usefulness; that the sound judgment and unwearied industry of its editor, FREEMAN HUNT, Esq., have contributed largely toward elevating the standard of mercantile education throughout the country; and that this Association take great pleasure in commending the *MERCHANTS' MAGAZINE* to general circulation, and the especial support of the business community.

The following is the letter of the Corresponding Secretary, communicating the resolution of the Association :—

DEAR SIR :—I beg to wait on you, as above, with an official enunciate of the Institution I have the honor to represent. I may be permitted to express a very high appreciation of long continued and successful effort in a greatly neglected sphere of duty—a pioneer in the cause. I trust, my dear sir, that it has proven to yourself "its own exceeding great reward," and that prosperity, somewhat commensurate with deserving, may continue to attend upon your every effort in the laborious and honorable position which it has been your good fortune to dignify and adorn.

I am, dear sir, with great respect, your very obedient servant,

JAMES LUPTON, Cor. Secretary.

FREEMAN HUNT, Esq., Editor *Merchants' Magazine*.

MERCANTILE LIBRARY ASSOCIATION OF NEW YORK.

The Twenty-eighth Annual Report of the Board of Directors of this institution has been published. It is quite elaborate, embracing some twenty-four pages octavo, and giving a minute detail of the operations of the Society during the year 1848. Looking back to the period when it first started into existence, twenty-eight years ago, with its 150 members, and a library of but 700 volumes, and tracing carefully through each successive year its progress in usefulness and extent, to the present time, which finds it in the possession of a library of 29,000 volumes, and an income of \$7,000, derived exclusively from the avails of the subscription book, without extraneous aid from any quarter, its members cannot fail of finding much to congratulate themselves upon. The onward course of this institution illustrates the truth of the maxim, that perseverance and a fixed determination to devote to the final accomplishment of a laudable object those energies with which we are gifted for wise and useful ends, at all times reward us for our exertions in the satisfaction we ourselves feel, and in the approval of our fellow men. We regret that we have space for only a brief synopsis of the report. The number of members on the 31st of December, 1847, was 2,761; the number added during the year 1848, was 681;—deducting the withdrawals of 1848, the total number of members on 1st January, 1849, was 3,004, exhibiting a nett gain of 343 during the last year. One hundred and one have been suspended for non-payment of dues. Two thousand two hundred and seventy-six volumes have been added to the library during the last year, 2,230 by purchase and the remainder by donation. The total number in the library is, according to the report, 29,157. The works added in 1848 are classed thus :—Works of science and art, 291; general literature, 1,254; fiction, 631. This statement shows the addition of a larger number of volumes than any of the past eight years, and a small increase as compared with the last. The total expenditure for books and periodicals during the year amounts to \$3,293, including the sums expended for binding and repairing books. It appears by the Treasurer's report that the balance remaining in the treasury on the 31st of December, 1848,

was \$365 10; and that the receipts during the year 1848 were \$6,303 21. The expenditures for the same period were \$5,558 20, leaving a balance on the 31st of December, 1848, of \$110 11. With a passage from the report, referring to the recent establishment of an "Institution for the Savings of Merchants' Clerks," we close our summary of this interesting report:—

The Legislature of this State having granted a special charter to the "Institution for the Savings of Merchants' Clerks," and a suitable location having been selected, the Bank commenced operations by the receipt of deposits on the 1st day of July last. By the provisions of its charter, the President, Vice-President, and Treasurer of the Mercantile Library Association are perpetual trustees of it; while the selection of our own walls for its location, and the choice of one of our most esteemed ex-presidents as its chief clerk, evinces the desire felt to have our members co-operate fully and efficiently in maintaining its position among the most favored of its class. Let it not be said that the clerks of this great commercial city failed to avail themselves of the benefits resulting from habits of frugality which it is the design of this institution to promote among them—but suffered it to languish between life and death, from want of support, while others similar to it have hitherto proved so successful. There are few, if any, who having the will, cannot find a way, to save something from their earnings, however small, to keep which safe, this Savings' Bank, so long needed, has been established—remembering that its object is not to make poor men suddenly rich, but to encourage economy in small matters, which is, and ever has been, the surest and safest road to independence.

The Board of Trustees have declared a dividend at the rate of six per cent per annum on all sums of five dollars and upwards, deposited untouched, for three months, payable on and after the 16th instant. We express the hope that both institutions will maintain towards each other the most friendly relations, and render mutual aid and benefit on all occasions.

ST. LOUIS MERCANTILE LIBRARY ASSOCIATION.

We have received the Third Annual Report of the Mercantile Library Association at St. Louis. This institution, though young in years, bids fair to rival in its progress kindred institutions of an older growth. It is composed of 371 members, 22 of which are life members, 148 proprietors, 144 clerks, and 57 beneficiaries. During the last year 79 members have withdrawn, and 90 new members have joined; making a gain over the number at the date of the second annual report, of 11 members. "This increase," says the report, "though small, is encouraging, under the circumstances. Fears were entertained that many persons would withdraw from the Society after the first year or two of its existence. These anticipations have been realized by the loss, up to the present time, of 152 members. Many became members merely upon solicitation, and from a willingness to assist in starting what they deemed a meritorious enterprise. Probably few of the original friends of the Association expected to find as many members connected with it in its third year as there were in its first. At the outset, many joined upon impulse; a smaller number upon principle; and still fewer were those staunch friends of the Association who resolved to adhere to it under all circumstances, and to sustain it at any sacrifice of time, of effort, and of money."

From the Treasurer's report, we learn that the receipts for the last twelve months have been \$2,768 21, and the whole expenditures, \$2,689 02; showing a nett gain for the year 1848, over that of 1847, of \$1,169 24. The Association possesses books and other assets worth \$4,633 62, and is entirely out of debt, with a cash balance on hand of \$134.

The whole number of volumes added to the Library within the last year, 400, and their value is \$1,139 11. They now own 2,781 volumes, valued at \$4,147 82, and have, besides, the use of 71 volumes belonging to the Chamber of Commerce, making an aggregate of 2,852 volumes.

"We now receive and lay upon our table," we quote from the Report, "twenty-nine periodicals, of which thirteen are foreign and sixteen American publications, including among the latter, two city daily newspapers. We take as many Reviews and Magazines as was received in 1847 by the Philadelphia Mercantile Library. Many of them are of permanent value, on account of their scientific and literary merits."

With a few of the closing paragraphs, we close our brief synopsis of its contents:—

"The Directors have now reported to you upon all the more important interests committed to their care. They cannot, however, consider themselves absolved from their duties, and they have improved this opportunity of earnestly appealing to those present, to merchants, clerks, and to all classes of our population, in behalf of this Association. Its objects are public and laudable. Its degree of progress is highly encouraging. The foundation has been laid upon which to rear a great library, which shall be an honor and a blessing to St. Louis. All our citizens are interested in this project, since, by our fundamental law, our books are accessible to all upon the most reasonable terms, and there is not now here any important public library. All have reason to rejoice that so promising a beginning has been made, and all ought, with alacrity, to lend a helping hand. Vigorous exertions must be made if the increase of our library is to keep pace with the increase of our population. What part of this work will each of you perform?

"Our Association is but three years old, and yet we have nearly as many books as was possessed by the Mercantile Library Association of New York, when it had existed five years; as that of Cincinnati, when it had existed eight years; as that of Philadelphia, when it had existed ten years; and more than that of Boston, after an existence of nineteen years.

"During the last year, more volumes were added to our library than to the Mercantile Library of New York, in either of the years 1840 or 1843. The pecuniary value of the books acquired by us last year, is but five per cent less than that of the additions, made in 1847, to the Mercantile Library of Philadelphia.

"These comparisons are not made from vain-glorious motives, but solely to influence those timid spirits who withhold their aid, until assured of the success and stability of the objects upon which it is tardily bestowed. To such faint hearts, we say, that this Institution has been uniformly prosperous; is secure in the affections and cordial support of nearly 400 members; and we ask you, gentlemen, to endorse our pledge, that it shall continue to flourish, while you and we live to uphold its fortunes, and to contribute to its still greater usefulness."

IRON WAREHOUSE FOR CALIFORNIA.

It appears, from the Liverpool papers, that the want of any place to store the goods which are now going to California, determined Messrs. James Starkey & Co., of Liverpool, (Eng.) who have a house in San Francisco, to send out the materials for a warehouse. A contract was consequently made with Messrs. T. Vernon & Co. for one to be built of iron, under the direction of Mr. Grantham, civil engineer. The warehouse is of iron, and the roof is similar to those used at railway stations. The sides and roof are thinly covered with galvanized corrugated iron plates. There are large folding doors in the centre, and windows in the roof. The order was given on the 5th of January, 1849, and the men were fairly at work on the 9th, and on Saturday, the 3d of February, it was entirely erected, and ready to be taken down; having been constructed in the short space of twenty-three working days.

MANUFACTURE OF LINEN AT MAYSFIELD.

The Legislature of Kentucky has recently granted an act of incorporation to a company in that State, for the manufacture of linen at Maysville, with a capital of \$200,000, in shares of \$100 each, payable in calls of \$10, not oftener than once in thirty days. The intention is to manufacture linen of hemp, though flax may be used. Mason county, in which Maysville is situated, is the first hemp-growing county in the State, having produced in some seasons, 3,000 tons. The soil near Maysville, both in Ohio and Kentucky, is admirably adapted to flax, and if a demand existed for it any quantity could be produced. The farmers in that section often grow flax for the seed only, cutting the straw with a scythe, which, after being threshed, is thrown away.

THE BOOK TRADE.

- 1.—*Precedents of Indictments and Pleas, adapted to the use both of the Courts of the United States, and those of all the several States; together with notes on Criminal Pleading and Practice, embracing the English and American authorities generally.* By FRANCIS WHARTON, author of a Treatise on American Criminal Law. Philadelphia: James Kay, Jun. & Brother.

In 1846, Mr. Wharton published a Treatise on American Criminal Law, which was received with general favor and approbation, supplying as it did, in an acceptable manner, a want that had long been felt in American Criminal Jurisprudence. The present volume of forms is a valuable companion to that work, and in connection with it forms a complete practical treatise on the subject. In fact, a collection of precedents is almost an indispensable part of a treatise on such a subject, designed to be useful to the practitioner.

The forms are arranged under the appropriate heads, those relating to the same offence being placed together, and arranged with the discrimination of the true lawyer into their classes: first, those which have been directly sustained by the courts; second, those which have been prepared by eminent pleaders, but which have not been judiciously tested; and third, those which have been drawn from the English books.

It is obvious that a careful classification like this, gives this work an immense advantage over a mere collection of forms thrown together without discrimination, in which the worst precedent is as likely to stand first as last.

In many cases we observe that Mr. Wharton gives the names of gentlemen by whom particular forms have been furnished, and the cases in which they were tested.

Mr. Wharton's able and scholarly notes render the work something more than a mere volume of forms. With their aid the practitioner might, we think, in many cases, dispense with the use of the treatises. At the head of the precedents of each class is appended an elaborate note, in which the English and American cases are considered. Taken together they constitute quite a full treatise on the different heads of Criminal Law. Were there nothing in the author's previous reputation as a law writer to furnish a guaranty for the reliableness of the present work, the more closely it is examined the more confidence it inspires from its intrinsic merits. His reputation, however, is well established by his previous labors, among which is the very learned American edition of Smith's Leading Cases.

- 2.—*Maternity; or the Bearing and Nursing of Children. Including Female Education and Beauty.* By O. S. FOWLER, Editor of the American Phrenological Journal. 12mo. pp. 221. New York: Fowlers & Wells.

Few, we imagine, at this time will be disposed to deny the position of Mr. Fowler in the outset; namely, that the various states of the mother's mind and body, before the birth of offspring, go far towards determining their health or debility, amiableness or ill nature, intelligence or stupidity; a fact that renders child-bearing inconceivably momentous in its influence on human destiny. The work is divided into four sections or parts, in which the writer treats successively of the physical relation of offspring to the mother, the nourishment of the embryo, influence of the various states of maternal mentality on the primitive character of offspring, and delivery, its pains, &c. Mr. Fowler, if not an elegant, is certainly a clear and vigorous writer; and in this, as in all former productions of his mind and pen, has enforced many useful and instructive lessons.

- 3.—*How to be Happy. An Admonitory Essay, for General and Family Perusal, on Regimen, Expediency, and Mental Government.* By ROBERT JAMES CULVERWELL, M. D., author of "A Guide to Health, or what to Eat, Drink, and Avoid." 8vo. pp. 94. New York: J. S. Redfield.

An interesting and instructive manual, furnishing many plain, practical, and important remarks touching the health, and consequently the happiness of man. The subjects treated in this volume, in successive chapters, namely, Health, ill and good, and the preservation of it; diet, the philosophy of the mind, the value of life, the anatomy of low spirits, the folly of feasting, relaxation, rest, sleep, contain views evidently the result of extensive observation, which cannot fail, if duly heeded, of preventing in a good degree the design of the author, as expressed in the title of the work.

- 4.—*The Constitutions of France, Monarchical and Republican; together with brief historical remarks relating to their origin, and the late Orleans Dynasty.* By BENJAMIN ROELKE, of the Boston Bar. 12mo. pp. 156. Boston: James Munroe & Co.

The object of this work is, not so much to advance an opinion, or speculative remarks on the causes of the recent revolution in France, and the probable future destiny of that country, as to furnish every one with some additional means to form an opinion for himself. For this purpose, the compiler has introduced the constitutions which existed in France while she was a monarchy and a republic in detail. Brief historical remarks are added, which will serve to refresh the memory of the reader in regard to the circumstances under which the constitutions came into existence. The writer thinks that the recent overthrow of the Orleans dynasty was desirable and just. The work will be found useful as a book of reference, especially as the great works on French history constantly refer to those documents, while they state them only in general outlines.

- 5.—*The Artist's Married Life; being that of Albert Durer. Translated from the German of Leopold Schefer.* By MRS. J. R. STODART. Reprinted from the London edition. 12mo. pp. 257. Boston: James Munroe & Co.

The novels of Schefer are not much known to the English reader. The present translation of one of them, after the manner of Sir Walter Scott's "Tales of my Landlord," purports to be an old manuscript intrusted by Albert Durer on his death-bed to his friend Pickheimer, with instructions that it should be given to the world when all those to whom its contents might cause pain, were no more. We have not found time to read it, but we are assured by those on whose judgment we can rely, that it is a gem of its kind. One thing we will say: it is elegantly printed, as is almost every thing from the press of these enterprising publishers.

- 6.—*Lives of Distinguished Shoemakers.* 12mo. pp. 340. Boston: T. Wiley, Jr.

This volume contains sketches of the lives and characters of seventeen distinguished shoemakers, from St. Crispin to the benevolent John Pounds. The author, who says he has made shoes, and hopes to make more, has descended into "the labyrinths of biographical lore," and brought up whatever of value to his purpose he could find. He has collected what has been widely scattered, condensing what has been too greatly expanded into a compact and available form, for the benefit of readers whose access to extensive libraries, as well as opportunities for reading, are necessarily limited.

- 7.—*The Massachusetts State Record and Year Book of General Information.* 1844. Edited by NAHUM CAPEN. Vol. III. Boston: James French.

This, the third annual volume of the Massachusetts State Record of Mr. Capen, is equal to the preceding volumes. It contains a mass of information relating to the government, resources, and institutions of Massachusetts, nowhere else to be found in so convenient and systematic a form. Mr. Capen, the compiler, is a most accurate statistician, and spares no labor to procure, and present the results of that labor in systematic and convenient form for reference. It appears to us an indispensable *requisitum* for every citizen of that State, and will, we think, afford the stranger a better and more correct idea of the value of her institutions than is elsewhere to be found.

- 8.—*Analysis of the Principles of Rhetorical Delivery, as applied in Reading and Speaking.* By BENJAMIN PORTER, D. D., late President of the Theological Seminary, Andover, etc. Revised and enlarged. By ALLEN H. WELD, A. M., author of "Latin Lessons," etc. Boston: B. B. Mussey & Co.

This is a new and revised edition of a deservedly popular work. Few school-books have met with more favor, or stood better the test of use, than Porter's *Analysis*; and few, if any, have been made, on the subject of elocution, more philosophical, discriminating, and practical. No changes have been made in this edition which affects the original character and design of the work. No work of an educational character that has fallen under our observation, is better adapted to its design or object.

- 9.—*Natural History of Enthusiasm.* By ISAAC TAYLOR. New York: Robert Carter & Brothers.

This work has passed through nine large editions in England, and almost as many more in this country; a pretty conclusive fact of its popularity. It ably depicts, under its principal forms, fictitious sentiments in matters of religion, including, of course, a consideration of those opinions which seem to be either the parents or the offspring of such artificial sentiments.

1.—*The New England Business Directory. Six Parts in One. Containing a New Map of New England, an Almanac for 1849, a Memorandum for every Day in the Year, and a Business Directory for New England, etc.* New York: Pratt & Co., 161 William-street. Boston: L. C. & H. L. Pratt.

The title, a part of which we have quoted above, affords a very imperfect idea either of the contents or value of this work to business men. The Directory of New England, which includes the States of Maine, Massachusetts, New Hampshire, Rhode Island, Connecticut, and Vermont, shows the name, location, and business of all the mercantile firms, manufacturing establishments, banking, moneyed, and literary institutions, courts, public offices, and all the various miscellaneous departments which contribute to the business of New England. We have never seen a work of the kind giving so much industry and care in the getting up, and so systematically and conveniently arranged in every particular. It is the work of four brothers, who have devoted their whole time, and a capital of some \$20,000 to the enterprise, and the information has been obtained by personally visiting every town in the New England States, so that the utmost degree of confidence can be placed in the accuracy of the information thus brought together. By referring to this book, we are enabled to find the name of every manufacturing company or individual manufacturer, the kind of goods manufactured, the yearly amount of each article manufactured, the quantity of raw material consumed, number of males and females employed, &c., in each, and, in short, every particular in regard to the manufacturing industry of every town in the New England States. The tabular statements of the banks show the name, location, capital, the names of the presidents and cashiers, and the discount days of every bank in the six States. It would occupy more space than we can well spare to enumerate the varied contents of a volume that cannot fail of securing the encouragement and support of every business man in the United States. We understand that the enterprising publishers are engaged in preparing a similar work on the great State of New York. The directories of the several States are done up separately, and sold for twenty-five cents each; or the entire work neatly bound, including each of the New England States, for \$1. We shall refer to this publication in a future number of the *Merchants' Magazine*.

2.—*Twelve Lectures on Comparative Embryology, delivered before the Lowell Institute, in Boston, December and January, 1848-9.* By LEWIS AGASSIZ, Professor of Zoology and Geology in the Lawrence Scientific School, Cambridge University. Phonographic Report, by JAMES W. STONE, A. M. M. D., President of the Boston Phonographic Reporting Association, and of the Boylston Medical Society. 8vo. pp. 104. New York: Dewitt & Davenport.

Embryology, which has but recently become a subject of scientific investigation abroad, in this country may be considered as entirely new. Professor Agassiz has embodied in these lectures all that has been hitherto done in Europe, and added numerous observations of his own, made in the United States, and in a form at once scientific and so illustrated as to be interesting to the common reader. The Phonographic report of Dr. Stone was found to correspond, word for word, with the written lectures, except that one word was missing, which the learned Professor stated that he had purposely omitted in the reading.

3.—*The Architect; a Series of Original Designs for Domestic and Ornamental Cottages, connected with Landscape Gardening. Adapted to the United States.* By W. A. RANLETT. New York: Dewitt & Davenport.

We noticed, in terms of high, but deserved commendation, the completion of the first volume of this beautiful work of Mr. Ranlett, one of the best practical as well as theoretical architects in the United States. The fifth and sixth numbers of the second volume have been published, and only confirm our previously expressed opinions as to the great merits of the work. The number, variety, and elegance of the designs, and the completeness of the information furnished in regard to building, are features that must secure for this publication a wide circulation, and render it useful not only to the accomplished architect, but to all persons desirous of building residences in town or country.

4.—*The Improvement of the Mind.* By ISAAC WATTS, D. D. New York: A. S. Barnes & Co.

A new and handsome edition of an old and most excellent work. To use the language of Dr. Johnson, we would say, "Whoever has the care of instructing others, may be charged with deficiency in his duty, if this book is not recommended."

- 14.—*Essay on the Union of Church and State.* By BAPTIST WRETHESLEY NOEL, M.A. 12mo. pp. 442. New York: Harper & Brothers.

The author of this work, an eminent divine of the English Established Church, and a gentleman holding a high position in English society, has recently separated from the establishment from conscientious motives. This work, which is a frank and manly attack upon the union between Church and State, contains the author's reasons for the course he has felt compelled to adopt. While stating, without reserve, the influence of the system upon prelates, he charitably admits the many instances in which divines, raised to the most ensnaring honors, have successfully resisted their temptations. It is divided into three parts: the first is devoted to a consideration of the principles of the union between the Church and the State; the second to the effects of that union; and in the third he points out what he considers the best means of promoting a revival of religion in the country. The union he mentions is condemned by the constitution of the State, by the parental relation, by history, by the Mosaic law, by the practices of the Old, and by the teachings of the New Testament.

- 15.—*History of Hannibal the Carthaginian.* By JACOB ABBOTT. With engravings. 18mo. pp. 295. New York: Harper & Brothers.

This is the third volume of Mr. Abbott's new series of histories, designed, and we may add, well adapted to the taste and capacity of young persons from the ages of sixteen to twenty-six. Concise and comprehensive, they are written in pure English, and supply an important void in literature, designed for popular and family reading. Those who have read either of the former volumes of the series, will not readily relinquish the pleasure of perusing the present number of it.

- 16.—*The Family Shakspeare.* In one volume. In which nothing is added to the Original Text; but those words and expressions are omitted which cannot, with propriety, be read aloud in a family. By THOMAS BOWDLER, Esq., F. R. S. and S. A. From the Sixth Edition. New York: John Wiley.

That there are many passages in Shakspeare's dramatic writings which chaste and delicate minded people would not read in the family circle aloud, will not be denied by any one at all acquainted with the

"Sweetest bard that ever sang."

In the beautiful volume before us the indecent expressions have all been omitted, and that, too, without in any degree perverting or impairing the sense and meaning of the author, so that the reader will have no cause to regret the loss of the words that have been omitted. Although we should not think of disposing of our edition of Shakspeare, any more than we should of putting away the Bible, as translated in King James' time, we are grateful to the editor of this edition, and shall add it to our library, and use it whenever we read aloud, for the gratification of the family circle. Parents and guardians of youth are certainly under great obligations to Dr. Bowdler for preparing, and to Mr. Wiley for publishing a Family Shakspeare, which may be read aloud in the mixed society of young persons of both sexes, *sans peur et sans reproche*.

- 17.—*New York in Slices: by an Experienced Carver. Being the Original Slices published in the New York Tribune.* Revised, enlarged, and corrected, by the Author. With Splendid Illustrations. 8vo. pp. 118. New York: William H. Graham.

The "Slices" embraced in this volume were widely circulated, and very generally read, while passing through the columns of the *Tribune*; and we thank the author for thus grouping them in a form more durable than the ephemeral daily sheet. Presenting, as they do, some of the most racy, graphic, life-like sketches of places, scenes, and characters in the great commercial metropolis, they cannot fail of obtaining a still wider circulation, and a more enduring popularity.

- 18.—*Laneton Parsonage: A Tale. Part Third.* By the Author of "Amy Herbert," "Gertrude," etc. Edited by the Rev. W. SEWALL, B. D., Fellow of Exeter College, Oxford.

This is the third volume that has been published under the same general title, but each a distinct story, so that there is no connection that renders it necessary to read the parts in the order of their publication. Judging from the popularity that the previously published works of the same writer have obtained among the more religiously disposed novel readers, we presume that this last of the series will be sought with equal avidity, as it certainly possesses equal interest.

Philosophy of Religion. By J. D. MORELL, A. M., author of the "History of Philosophy." 12mo. pp. 359. New York: D. Appleton & Co.

lume contains in our view some of the best thoughts of the nineteenth century subject of the deepest interest to the whole human race. Christianity, as I understands its essence, is a deep, inward life of the soul—a life which cannot be accounted for by any scientific analysis, or expressed in any number of propositions which, in its evidences, in its conceptions, in its holy impulses and anticipations beyond the region of the logical understanding. The chapters on revelation and inspiration are singularly rational and clear, and we are free to say, that we recently taken up a book, touching the momentous question of religion, in have been more deeply interested. The views of the writer, though by no means, are presented in a singularly forcible and intelligible form, and we are glad that the work will command a degree of attention and excite an antagonistic discussion that cannot fail of being highly beneficial to the cause of truth.

Atteckism of the Steam Engine, illustrative of the Scientific Principles upon which its operations depend, and the practical details of its structure, in its application to Mines, Mills, Steam Navigation, and Railways, with various suggestions of improvement. By JOHN BROWN, C. E., editor of "A Treatise on the Steam Engine." pp. 282. New York: D. Appleton & Co.

work, as an introduction to the study of the steam engine, in its various applications, mines, mills, steam navigating railways, &c., we should say, from the examination have been able to give, is singularly clear, and well calculated to impart the rudiments of a scientific knowledge of the whole subject. It embodies the information now existing upon the subject of which it treats—not taken from a deduction deduced from mere theoretical considerations, but derived from the author's experience, "or from the personal communications of the most experienced engineers of the present time."

American Bee Keeper's Manual; being a Practical Treatise on the History and Domestic Economy of the Honey Bee, embracing a full Illustration of the whole, with the most Approved Methods of Managing this Insect through every stage of its Culture, the result of many years' Experience. By T. B. MINER. Illustrated by thirty-five beautiful engravings. 12mo. pp. 349. New York: G. P. Putnam, Agricultural Publisher and Bookseller.

le-page, which we have copied entire, sufficiently indicates the design of this work: it fills a vacuum in a branch of agricultural and rural literature that has long existed in this country. It is, we believe, the first full, practical treatise on the culture of bees that has been published in the United States, if we except a few short and fragmentary essays that have from time to time made their appearance. The work is more valuable from being the result of the author's practical experience, and many years of close application to the management and study of the honey bee, than from the success of Mr. Miner in the culture of this insect, which is said to have been recently secured, must secure for the work the confidence of the public.

California and Oregon Trail: being Sketches of Prairie and Rocky Mountain Life. By FRANCIS PARKMAN. 12mo. pp. 440. New York: George P. Putnam. The journey which this narrative so graphically describes, was undertaken by Mr. Parkman with a view of studying the manners and character of Indians in their native state. He has accordingly sketched those features of their wild and picturesque life which fell under his own eye, and in doing so appears to leave a correct and faithful record of their characters. Recent events connected with the regions of territory which the traveller passed, renders the publication at this time seasonable. The work was commenced at the close of 1846, unlike some of the publications of the same kind, it is fair to infer that it was not prepared simply to supply the demand of a gold hunting fever.

Works of Washington Irving. Vol. VII. New York: George P. Putnam. The present volume of this model edition of our most popular American author, Washington Irving's inimitable "Tales of a Traveller," which are too well known and too highly valued to require our commendation. Our only object, therefore, in noticing the volume at all, is to commend the enterprise of the publisher for the taste and liberality displayed in producing an edition of a favorite author, in a form as elegant as it is substantial and durable.

24.—*Modern Society; or the March of Intellect. The conclusion of Modern Accomplishments.* By MISS CATHARINE SINCLAIR, author of "Modern Accomplishments" "Charles Seymour," etc. New York: Robert Carter & Brothers.

In "Modern Accomplishment," an agreeable fictitious narrative, the author delineated the progress of education; in this, which may be read either in connection or as a separate story, she traces the results of education on the character, temper, and mind of modern society. It is an agreeable narrative, and its teachings are in accordance with the popular theology, or that which is considered as such by a large portion of the Christian world.

25.—*Life and Times of the Rev. Philip Henry, M. A., Father of the Commentator.* New York: Robert Carter & Brothers.

The life of Philip Henry, from the pen of his pious and gifted son, "has long been regarded as one of the most valuable biographical treasures in the English language," and has been referred to, both among churchmen and dissenters, for upwards of a century, as exhibiting one of the most delightful examples of eminent piety, prudence, humility, zeal and moderation, which the history of the Church has to produce.

26.—*Napoleon Louis Bonaparte, First President of France. Biographical and Personal Sketches, including a visit to the Prince at the Castle of Ham.* By HENRY WIKOFF. New York: George P. Putnam.

Mr. Wikoff became acquainted with the present President of the French Republic during his confinement in Ham, and subsequently in England, and records several interesting conversations with that distinguished personage. The substance of the volume was originally published in the *Democratic Review*, where it attracted considerable attention. The author, since its appearance, has, we learn, left this country for the purpose of passing some time with his friend Louis.

27.—*Sermons.* By HENRY EDWARD MANNING, M. A., Archdeacon of Chichester. First American from the Sixth London Edition. New York: Stanford & Swords.

Mr. Manning, the author of this volume of discourses, delivered from time to time in the regular course of his ministerial duties, is now regarded as one of the most able prelates of the English Church. He is certainly a singularly forcible and beautiful writer. His theology is of course in accordance with the teachings of the Church to which he belongs; but aside from the peculiar doctrines inculcated in this collection, by inference, as the sermons mainly belong to that class denominated practical, they contain views of duty that will be appreciated by those who may differ with the preacher on mere sectarian dogmas.

28.—*Poems of Religion and Society.* By JOHN QUINCY ADAMS, Sixth President of the United States, etc. With Sketches of his Life and Character. By JOHN DAVIS and T. H. BENTON. New York: William H. Graham.

This neat little volume contains some thirty or forty poems, mostly of a devotional character, collected and published since the death of that great and good man. The notices of Mr. Adams, appended to the volume, comprise the remarks made in the United States Senate by Messrs. Benton and Davis, on the official announcement of his sudden death in the Capitol of the Republic.

29.—*The Pearl of Days: or the Advantage of the Sabbath to the Working Class.* By a Laborer's Daughter. With a sketch of the Author's life, by herself; and a Preface by an American Clergyman. New York: M. W. Dodd.

The institution of a Sabbath, however men may differ as to the particular day, or the duty of suspending labor, is unquestionably one of Heaven's best gifts to the industrious and virtuous poor. The temporal advantages of a due observance of the day are forcibly illustrated in this simple and unpretending narrative; and we heartily commend it to all who lightly esteem the blessing it sheds on our "work-day world."

The following works are announced as in preparation for early publication, by GEORGE H. DERBY & Co., of Buffalo, namely:—*Life and Times of De Witt Clinton.* Embracing a full account of his private life and public services, by an eminent citizen of New York. *The Life of Gen. William Henry Harrison, Ninth President of the United States.* Containing a full account of his services in the cabinet and field. Illustrated. 12mo., muslin gilt. *Turner's History of the Holland Purchase of Western New York.* With eight portraits of the early pioneers. Maps and plates. 8vo. pp. 600. *Lives of James Munroe and James Madison.* By the Hon. JOHN QUINCY ADAMS. To which is added, a Life of the Author. With portrait. 1 vol. 12mo.

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HUNT'S

MERCHANTS' MAGAZINE

AND

COMMERCIAL REVIEW.

MAY, 1849.

Art. I.—THE BRITISH EMPIRE IN THE EAST.

[PART II.]

"THERE is not a nation upon the surface of the earth," says Gibbon, "which cannot point to the individual son of Japhet, from whose loins its ancestors have lineally descended." In particular, barbarous nations appear to indulge a peculiar gratification founded upon pretensions to a remote antiquity. Oriental nations have in most cases, in giving scope to a boastful and turgid vanity, carried their claims to a point bordering upon the ridiculous. A fragment of Chaldaic history relates, that there were written accounts preserved at Babylon comprising a period of fifteen myriads of years. The pretended duration of the Chinese monarchy is yet more remarkable. A single king of Egypt was believed to have reigned three myriads of years.

The present age of the world, according to the system of the Hindoos, is divided into four great periods, called *yugs*. The first is the Satya yug, comprising 1,728,000 years; the second, the Treta yug, comprising 1,296,000 years; the third, the Dwapar yug, comprising 864,000 years; and the fourth, the Cali yug, which will extend to 432,000 years. Of these periods the first three have expired, and at the present time, 4,943 of the last. From the commencement, therefore, of the Satya yug to the present time, is comprised a period of 3,892,943 years—the antiquity to which this nation found their claim.

It is related that at the commencement of the Satya yug, or 3,892,911 years ago, lived Satyavrata, otherwise called *Vaivasvata*, (for these remote personages were frequently blessed with an *alias*,) and also the seventh Menu. He had escaped, with his family, an universal deluge, which had destroyed the remainder of the human race. Of his descendants were two royal branches: the one called the children of the sun; the other, the children of the moon. The first reigned at Ayodhya, or Owde; the second at Pratish-tana, or Vitora. At the thousandth year of the present, or Cali yug, both these families or dynasties became extinct. Satyavrata, the primitive sire, prolonged his existence as well as his reign during the entire period of the

Satya yug, or 1,728,000 years. In addition to the two lines of solar and lunar kings, a different race, who reigned in Magadha, or Bahar, commences with the fourth period. Of these, twenty, in regular descent from their ancestor, Jarasandha, extended to the expiration of the first thousand years of the present yug, and were cotemporary with the last thirty princes of the solar and lunar races. At the memorable epoch of the extinction of those branches, the house of Jarasandha also failed; for the reigning prince was slain by his prime minister, who placed his son Pradyota on the throne. Fifteen of the descendants of this usurper enjoyed the sovereignty, and reigned from the date of his accession, 498 years, to the time of Nanda, the last prince of the house of Pradyota. He, after a reign of 100 years, was murdered by a Brahmin, who raised to the throne a man of the Maruya race, named Chandragupta. This prince is reckoned, by Oriental antiquarians, the same with Sandracottos or Sandracuptos, the cotemporary of Alexander the Great. Only nine princes of his line succeeded him, and held the sceptre for 137 years. On the death of the last, his commander-in-chief ascended the throne, and, together with nine descendants, to whom he transmitted the sovereignty, reigned 112 years. After that period the reigning prince was killed, and succeeded by his minister Vasudeva. Of his family, only four princes are enumerated; but they are said to have reigned 345 years. The throne was next usurped by a race of Sudras,* the first of whom slew his master and seized the government. Twenty-one of this race, of whom Chandrabija was the last, reigned during a space of 456 years. The conclusion of the reign of this prince corresponds, therefore, with the year 2648 of the Cali yug, and with the year 446 before the birth of Christ; and with him, according to Sir William Jones, closes the authentic system of Hindoo chronology.

The character which the Brahmins assign to the several yugs, is a remarkable part of their system. The Satya yug is distinguished by the epithet of golden; the Treta yug by that of silver; the Dwapar yug by that of copper; and the Cali yug is called earthen. In these several ages the virtue, the life, and the stature of man exhibited a remarkable diversity. In the Satya yug, the whole race were virtuous and pure; the life of man was 100,000 years, and his stature 32 feet. In the Treta yug one-third of mankind were corrupt, and human life was reduced to 10,000 years. One-half of the human race were depraved in the Dwapar yug, and 1,000 years bounded the period of human life. In the Cali yug, all men are corrupt, and human life is restricted to 100 years. But though in the Satya yug men lived only 100,000 years, Satyavrata, according to the chronological fiction, reigned 1,728,000 years; in the Treta yug human life extended only to 10,000 years, yet fifty-five princes reigned, each, at a medium, more than 23,000 years; in the Dwapar yug, though the life of man was reduced to 1,000 years, yet each of the several princes who reigned during that period held the scepter for the average space of 29,793 years.

The people of Hindostan and the ancient nations of Europe came in contact at a single point. The expedition of Alexander the Great begun and in some sort ended their connection. Even of this event, so recent and remarkable, the Hindoos have no record; they have not even a tradition which can with any certainty be traced to it. From the scattered hints contained in the writings of the Greeks, the conclusion has been drawn, that the Hindoos

* The lowest of the four castes of Hindoos, whose occupation is servile labor, and who are held in abhorrence and contempt by the other castes.

at the time of Alexander's invasion, were in a state of manners, society, and knowledge, precisely the same as that in which they were found by the nations of modern Europe ; it is certain that the few features described by the Greeks, are pretty much the same as those which distinguish them at the present day. If we suppose that India began to be inhabited at a very early stage in the peopling of the world, its first inhabitants must have been few, ignorant, and rude. Until they have multiplied so far as to be assembled in numbers large enough to permit the benefits of social intercourse, and of some division of labor, their condition is not susceptible of amelioration. In a country overgrown with forest, which denies pasture to cattle, and precludes husbandry, the wretched inhabitants are reduced to all the hardships of the hunter's life, and become savages. The advantages of India in soil and climate are so great, that those by whom it was originally peopled would sustain no further hardship than what seems inseparable from a state of dispersion. They wandered probably for ages in the extensive plains and valleys of that productive region, and until the country became considerably peopled, it is not even probable that they would be formed into small tribes. As soon as a young man became, in his turn, the head of a family and the master of cattle, he would find a more plentiful subsistence beyond the range of his father's flocks. When this state of things arises, we have reached a new stage in the progress of civil society. The rapidity with which a people advance through the several stages of society, depends upon the circumstances which promote population. When a small number of people range over extensive districts, a very numerous association is neither natural or convenient. Some visible boundary, a mountain or a river, marks out the limits of a common interest. When a people has increased to that extent as to compose a body too large and unwieldy to be managed by the simple expedients which connected together the tribe, the rude germ of a monarchy or political system suggests itself. The transition to the more regulated and artificial system of a monarchy and fixed laws is not sudden ; it is the result of a gradual preparation and improvement. The institution of government is generally admitted to be founded upon Divine authority. Nowhere among men have the laws and ordinances of society been more exclusively referred to divine authority, than by those who instituted the theocracy of Hindostan. The first legislator of the Hindoos, whose name it is impossible to trace, appears to have represented himself as the republisher of the will of God. He informed his countrymen that at the beginning of the world the Creator revealed his duties to man in four sacred books, called Vedas ; that during the first age, of immense duration, mankind obeyed them and were happy ; that during the second and third they only partially obeyed, and their happiness was proportionally diminished ; that since the commencement of the fourth age, disobedience and misery have totally prevailed, until the Vedas were forgotten and lost ; that now, however, he was commissioned to reveal them anew to his countrymen, and to claim their obedience.

The division into *castes*, made by the author of the Hindoo laws, may fairly be considered the first and simplest form of the division of labor and employments. The priest is a character found among the rudest tribes, by whom he is always regarded as of the highest importance. Whenever men begin to possess property and to cultivate the soil, the necessity of defenders is powerfully felt ; a class, therefore, of soldiers, as well as a class of husbandmen, becomes an obvious arrangement. There are other services, auxiliary to these, and necessary to the well being of man, for which it still re-

mains necessary to provide. The Hindoos were thus accordingly divided into four orders or castes. The first were the *Brahmins* or priests; the second, the *Cshatriyas* or soldiers; the third, the *Vaisyas* or husbandmen; and the fourth, the *Sudras* or servants and laborers. Upon this division of the people, and the privileges or disadvantages annexed to the several castes, the entire framework of Hindoo society so much depends, that it may fairly be regarded as a subject of the deepest consideration, and demands, at our hands, the fullest elucidation.

First. The priesthood is generally found to usurp the greatest authority in the lowest state of society. Knowledge and refined conceptions of the Divine nature are altogether incompatible with the supposition, that the Deity makes favorites of any particular class of mankind, or is more pleased with those who perform a ceremonial service to himself, than with those who discharge with fidelity the various and difficult duties of life. It is only in rude and ignorant times that men are so overwhelmed with the power of superstition as to pay unbounded veneration and obedience to those who artfully clothe themselves with the terrors of religion. The Brahmins, among the Hindoos, have acquired and maintained an authority, more exalted, more commanding and extensive, than the priests have been able to engross among any other portion of mankind. As great a distance as there is between the Brahmin and the Divinity, so great a distance is there between the Brahmin and the rest of his species. According to the sacred books of the Hindoos, the Brahmin proceeded from the mouth of the Creator, which is the seat of wisdom; the Cshatriya proceeded from his arm; the Vaisya from his thigh; and the Sudra from his foot; therefore is the Brahmin infinitely superior to all other human beings. The sacred books are exclusively his; the highest of the other classes are barely tolerated to read the word of God; he alone is worthy to expound it. The slightest disrespect to one of this sacred order is the most atrocious of crimes. "For contumelious language to a Brahmin," says the law of Menu, "a Sudra must have an iron style ten fingers long thrust red hot into his mouth; and for offering to give instruction to priests, hot oil must be poured into his mouth and ears." "If a Sudra sits upon the carpet of a Brahmin, in that case the magistrate, having thrust a hot iron into his buttock, and branded him, shall banish him the kingdom; or else he shall cut off his buttock." The following precept refers even to the most exalted classes: "For striking a Brahmin even with a blade of grass, or overpowering him in argument, the offender must soothe him by falling prostrate." Not only is extraordinary respect and pre-eminence paid to the Brahmins, but they are allowed the most striking advantages over all other members of the social body, in almost everything which regards the social state. In the scale of punishments for crimes, the penalty of the Brahmin, in almost all cases, is infinitely milder than that of the inferior castes. Although punishment is remarkably cruel and sanguinary for the other classes of the Hindoos, neither the life, nor even the property of a Brahmin can be brought into danger by the most atrocious offenses. A lower rate of interest for money is exacted from a Brahmin than from the other classes. As much the largest portion of existence, among the Hindoos, is engrossed by the performance of an infinite and burdensome ritual, which extends to almost every hour of the day, and every function of nature and society, the Brahmins, who are the sole judges in these complicated and endless duties, are rendered the uncontrollable masters of human life. Thus elevated in power and privileges, the ceremonial of society is no less remark-

ly in their favor. They are so much superior to the king, that the meanest Brahmin would consider himself polluted by eating with him, and death itself would appear to him less dreadful than the degradation of permitting his daughter to unite herself in marriage with his sovereign. Gifts to the Brahmins form always an important and essential part of expiation and sacrifice. When treasure is found, the Brahmin may retain whatever his good fortune places in his hands; another man must surrender it to the king, who is bound to deliver one-half to the Brahmins. The students for the sacerdotal office are commanded to obtain their subsistence by begging, and even to carry part of their earnings to their spiritual master. Begging is no considerable source of priestly revenue and power. The duties of the Brahmins may be summed up in a few words. They are, to read the Vedas, to teach them to the young Brahmins, and to perform sacrifices and other religious acts.

Second. The Cshatriyas, or military class, is the next in point of dignity and rank to the priestly tribe. In the rude and early state of society, the soldier, from whom is expected protection against hostile neighbors, is the second object of veneration and gratitude; and in the history of society, it will generally be found that the rank and influence of the military order is high, in proportion as the civilization of the people is low. To all but the Brahmins, the caste of Cshatriyas are an object of undoubted respect. They stand as much elevated above the classes below them, as the Brahmins stand elevated above the rest of mankind. To bear arms is the peculiar duty of the Cshatriya caste, and their maintenance is derived from the provision made by the sovereign for his soldiers.

Third. The Vaisyas are the third caste of the Hindoos, whose duties are to tend cattle, traffic in merchandise, and to cultivate the ground. They are superior only to the Sudras, who owe to them, however, the same awful respect and submission which it is incumbent on the Vaisyas to pay to the Cshatriyas and Brahmins.

Fourth. As much as the Brahmin is an object of intense veneration, so much is the Sudra an object of contempt, and even of abhorrence, to the other classes of his countrymen. The business of the Sudra is servile labor, and their degradation inhuman. Not only is the most abject and groveling submission imposed upon them as a religious duty, but they are driven from their just and equal share in all the advantages of the social institution. The crimes which they commit against others, are more severely punished than those of any other delinquents; while the crimes which others commit against them, are more gently punished than those against any other sufferers. Even their persons and labor are not free. "A man of the servile caste, whether bought or unbought, a Brahmin may compel to servile labor, because such a man was created by the Self-existent for the purpose of serving Brahmins." Any failure in the respect exacted of the Sudra towards the superior classes is avenged by the most dreadful punishment. Adultery with a woman of a higher caste is expiated by burning to death upon a bed of iron.

A Brahmin must never read the Veda in the presence of Sudras. "Let not Brahmin," says the law of Menu, "give advice to a Sudra; nor what remains from his table; nor clarified butter, of which part has been offered; nor let him give spiritual counsel to such a man, nor inform him of the legal expiation for his sin."

Although the adherence of each class to its particular employment was secured by the most rigid laws and the severest penalties, there were extra-

ordinary cases in which a limited departure was permitted. When a Brahmin cannot obtain subsistence by the assigned business of his order, he may apply himself to that of the Cshatriya or the Vaisya, but must never become so far degraded as to engage in that of the Sudra. The Cshatriya and Vaisya, in like necessitous circumstances, may have recourse respectively to the business of the class or classes below them, even that of the Sudra, but are strictly prohibited from profaning the employment of any class above them. The unfortunate Sudra, who is liable to be straitened in his own occupation by the interference and competition of the two orders above him, may be driven from his employment, without resource, by all the other classes of the community.

By the sacred books, the different castes were commanded to marry with those only of their own class; and the mixture of the classes from the union of the sexes, was guarded against by the severest laws. This was an occurrence, however, which laws could not prevent. Irregularities took place; children were born who belonged to no caste, and for whom there was no occupation. No event could befall society more calamitous. When a class, unholy and infamous on account of that violation of the sacred law to which they owed their unwelcome birth, became numerous, they must have filled society with the greatest disorders. This impure brood were called the *Burra Sunkar*, and a classification was resolved upon by the Brahmins and occupations assigned them. This, accordingly, was the commencement of arts and manufactures. The *Burra Sunkar* became all manner of *artisans* and handicrafts; one tribe of them weavers of cloth, another artificers in iron, &c. &c.; and thus were remedied two evils at once—the increasing wants of an improving society were provided for; and a class of men, the pest of the community, were converted to its service. This is another important era in the history of Hindoo society; and having reached this stage, it does not appear that it has made or that it is capable of making much further progress. Thirty-six branches of the impure class are specified in the sacred books. The highest is that sprung from the conjunction of a Brahmin with a woman of the Cshatriya class, whose duty is the teaching of military exercises. The lowest of all is the offspring of a Sudra with a woman of the sacred class. This tribe are denominated *Chandalas*, and are regarded with great abhorrence. Their profession is to carry out corpses, to execute criminals, and perform other offices, reckoned to the last degree unclean and degrading. If, by the laws of Hindostan, the Sudras are placed in a low and vile situation, the impure and mixed classes are placed in one still more odious and degrading. Nothing can equal the contempt and insolence to which it is the lot of the lowest among them to submit. They are condemned to live in a sequestered spot by themselves, that they may not pollute the town in which they reside. If they meet a superior, they must turn out of the way, lest he should be contaminated by their presence.

Consequent upon the division of a people into ranks and occupations, is the political establishment. Among the Hindoos, the government was monarchical and absolute. "A king," says the law of Menu, "is formed of particles from the chief guardian deities, and consequently surpasses all mortals in glory. Like the sun, he burns eyes and hearts, nor can any human creature even gaze on him." Among the less instructed and less civilized inhabitants of Asia, the monarch, for the more efficient administration of his dominions, divided his authority into pieces or fragments, as numerous as the provinces into which it was deemed convenient to distribute the empire.

Whatever powers the sovereign exercised over the whole kingdom, the vicergerent exercised in the province allotted to him. The gradations of command among the Hindoos were thus regulated: the lowest of all was the lord of one town; the next was the lord of ten towns; the third was the lord of twenty towns; the fourth was the lord of one hundred towns; and the highest vicergerent was the lord of one thousand towns. Every lord was amenable to the one immediately above him, and exercised unlimited authority over those below.

Provision for the defense of the country was one great branch of the duties of the sovereign; and when we consider, that, in the original division of the people, a fourth part of them were assigned to the profession of arms, with nothing to do but to acquire dexterity in its military exercises, it is remarkable that the nation was not of a warlike character. Their great lack of skill in the science of attack and defense induced them to place great reliance upon fortification. "One bowman," says Menu, "placed on a wall, is a match for 100 enemies, and 100 for 10,000." Such is the defective rudeness of the military art in Hindostan, that she has given way to every invader.

The next duty of the king, after providing for the protection of the nation from foreign aggression or domestic tumult, was the administration of justice. Its administration by him in person, and in the provinces by his deputies, and in the subordinate districts, in turn, by theirs, stands in the sacred books as a leading principle of Hindoo jurisprudence. For the more perfect discharge of this important duty, the king is directed to associate with himself Brahmins and counselors capable of giving advice. Any Brahmin, or even a Sudra in no case whatever. The court, or seat of judgment, is called the *Darbar*. The king or his judge, having seated himself, his body properly clothed, and his mind attentively fixed, begins with doing reverence to the deities who govern the world, and then proceeds upon the trial of causes. The plaintiff discovers himself by crying aloud, *Justice! Justice!* until attention is given to his importunity. Having been ordered to be silent, he advances before the judge, prostrates himself and offers a piece of money, telling his story plainly and with great humility of voice and gesture, and devoid of those oratorical embellishments in use in more refined nations. Parties are heard generally in person; but lawyers may appear in behalf of clients, except in case of certain high crimes. The judge examines the witnesses; inspects, if any, the writings. The wealth, the consequence, the interest, or the address of the party, become now the only considerations. The plaintiff visits the judge in private, and gives the jar of oil; his adversary bestows the hog which breaks it. The friends who can influence intercede; and excepting when the case is so manifestly proved as to brand the failure of redress with glaring infamy, the value of the bribe determines the cause.

Amid the imperfections adhering to the state of law among a rude and ignorant people, one is, that they preserve not their maxims of justice and their rules of judicial procedure distinct from other subjects. Notwithstanding the diversities of appearance, which, in different ages and countries, human nature puts on, the attentive observer may trace in it an astonishing uniformity with respect to the leading features which characterize the different stages of society, and often a surprising coincidence in particular thoughts and observances. The trials by ordeal, which distinguished Europe during the dark ages, hold a high rank among the Hindoos. There are nine different modes in use among them: first, by the balance; second, by fire; third,

by water; fourth, by poison; fifth, by water in which an idol has been washed; sixth, by rice; seventh, by boiling oil; eighth, by red hot iron; ninth, by images. The religious ceremonies, with which these trials are performed, it would be tedious and unprofitable to relate. Among the Hindoos, whatever be the crime committed, if it is by a Brahmin, the punishment is in general comparatively light; if by a man of the military class, it is more severe; if by a merchant or agriculturist, it is still increased; if by a Sudra, it is violent and cruel. Punishment immediately follows conviction. Where a fine only is the punishment awarded, it ascends with the class being harshest upon the Brahmin. An eighth part of the value of all grain, a sixth of the clear annual increase of trees, cattle, honey, and other articles of merchandise, may be taken by the king in the shape of taxes. The variation of the rates of interest upon the different castes, is also a peculiarity among the Hindoos. The rule established in the institutes of Menu is, to take, when there is a pledge, one and a quarter per cent per month; when there is no pledge, two per cent per month—that is, from a Brahmin; but from a Cshatriya, three per cent; from a Vaisya, four per cent; and from a Sudra, no less than five per cent per month. Upon a loan in money, interest, beyond the amount of the principal, was not a debt; upon loans in goods it was permitted to five times the amount of the principal. Compound interest was prohibited. A creditor may seize the person of the debtor's wife, his children, cattle, goods, &c., and even beat and bind his person, and compel him to labor for the discharge of the debt. If a man owes debts to several creditors, he is commanded to discharge, first one debt and then another, in the order in which they were contracted.

It is curious to trace the ideas concerning Divine power, which the natural faculties of man suggest to him at the different stages of his career. The causes of light and darkness, of drought and rain, of the thunder, of the hurricane, of the earthquake, suggest many an anxious inquiry; but to place all the objects of nature and the changes which they undergo into one group of ideas, and to inquire whence the whole proceeded, appears to be an operation too intricate to be the first which suggests itself to the mind of a barbarian. The savage is apt to regard the sun, which is the cause of day, as a beneficent deity. A spirit resides in the storm and presides over each waterfall; there is a god of war and a god of peace; a god of health and a god of sickness. There are very few, even among the most barbarous nations, who have not attempted to account for the origin of the universe. We have translations, from the Hindoo books, of several passages containing accounts of the creation. That contained in the sacred volume which bears the name of Menu, may be taken as a standard, being more circumstantial than any furnished by the Vedas. Besides accounts of what creation was, we have a relation of the manner in which the Hindoo divinity performed the creation. "The self-existing power," says Menu, "having willed to produce various beings, first, with a thought, created the waters. He placed in those waters a productive seed. The seed becomes an egg. In this egg the divine being deposited himself, and there he lay, in a state of inactivity, a whole year of the Creator; that is, according to the Hindoos, 1,555,200,000,000 solar years of mortals. At the end of this astonishing period he caused, by his thought, the egg to divide itself, and was himself born in the form of *Brahma*, the great forefather of all spirits; thus, from THAT WHICH IS, the first cause, was produced the divine male, famed in all worlds, under the appellation of *Brahma*." This is celebrated, in Hindoo books, as the great transformation

of the Divine being from neuter to masculine, for the purpose of creating worlds; and under this masculine form of Brahma it was that he effected the rest of creation. They believe that he was engaged in it for no less than 17,064,000 years. Of the two divisions of the egg, from which he had just been freed, he framed the heaven above, the earth beneath, and in the midst the subtle ether, the eight regions, and the permanent receptacle of waters. The creation of man, or at least of the Hindoos, is worthy of our particular regard. "That the human race might be multiplied, he caused the Brahmin to proceed from his mouth, the Cshatriya from his arm, the Vaisya from his thigh, and the Sudra from his foot." And as if "The Mighty Power" could not produce them by his male power alone, "he divided his own substance, and became half male half female. By this female the male half produced Viraj, a demigod and saint; Viraj, by the virtue of austere devotion, produced Menu, another demigod and saint." Menu, again, "desirous of giving birth to a race of men," produced ten lords of created beings; and these lords produced, at his command, "seven other Menus, deities, great sages, benevolent genii, fierce giants, nymphs, demons, serpents, birds, fishes, reptiles, comets, meteors, and men."

Some of the most enlightened of those who have made investigations respecting the ideas and institutions of the Hindoos, have been induced, from the lofty epithets occasionally applied to their gods, to believe and assert that this nation had a refined and elevated religion. Nothing is more certain than that such language is far from being proof of such a religion. As the language employed by any people is a very fallacious standard of the ideas which they entertain concerning the Divine nature, it is necessary to investigate the circumstances which enable us in any degree to define their vague expressions. Those circumstances are, the operations ascribed to the Divinity, the services reputed agreeable to him, and the laws which he is understood to have ordained. If these correspond with the attributes of infinite power, wisdom and goodness, we may feel confident that the sublime language is the expression of corresponding conceptions; but, on the other hand, where those operations, services, and laws, are in the highest degree unworthy of a perfect nature, we may rest assured that such sublime language is altogether without meaning, the effect of flattery and the meanest of passions; and that it is directly suggested, not by the most lofty, but by the most groveling and debased ideas of the Divine nature.

Of the host of Hindoo divinities, Brahma, Vishnu, and Siva are the most exalted. The Hindoos have distributed the creation and government of the universe among those three, styling Brahma the creator, Vishnu the reserver, and Siva the destroyer. Of the peculiar functions of Vishnu and Siva, no determinate conception appears to have been formed. Vishnu is not infrequently employed in acts which properly belong to a destructive power; and Siva is sometimes a divinity scarcely less beneficent than Vishnu. "The Hindoo religion," says an eminent Oriental scholar, "is so pliant that there is scarcely an opinion which it will not countenance."

Upon all occasions, ceremonies meet the attention as pre-eminent duties of the Hindoos. Upon rising from sleep, a Brahmin must rub his teeth with a twig of the fig-tree, repeating prayers. The twig is then carefully thrown away in a place free from impurities. Ablution next engages his attention. Standing in a river, sipping water and sprinkling it before him, he recites inaudibly the holiest text of the Veda, with the names of the seven worlds. He next throws water upon his head eight times, and lastly upon

the ground, reciting the following among other prayers: "O water, since ye afford us delight, grant us present happiness, and the rapturous sight of the supreme God." He then plunges three times into the water, repeating each time the expiatory text which recites the creation, and then, washing his mantle, the morning ablution is finished. He bathes again at noon, if an householder, and also at evening, if belonging to a sacred order of devotion, with prescribed ceremonies. Coming out of the water and putting on his mantle, he sits down to worship the rising sun, holding a considerable quantity of cusa-grass in his left hand, and three blades of it in his right, repeating the holiest text of the Veda. He then sips water three times, repeats and recites as before, rubs his hands as if washing them, touches with his wet hand his feet, head, breast, eyes, ears, nose and navel, and again three times sips water. If, however, he should sneeze or spit, he must not immediately sip water, but first touch his right ear. The sipping, however, being at last performed, he passes his hand briskly round his neck, while he prays: "May the waters preserve me." He then shuts his eyes and meditates in silence. He next ponders on the holiest of texts, and this sublime duty is performed in the following manner. Closing the left nostril, he draws his breath through the right nostril, and then closing it with his thumb and suspending his breath, he repeats to himself the holiest text of the Veda and makes other repetitions, after which he emits the suppressed breath, and thus finishes one part of his meditation. This process is repeated three times, and the whole is then concluded. He then stands on one foot, and looking towards the east, while his hands are held open before him in a hollow form, recites prayers to the sun, of which this is the most remarkable: "Thou art self-existent; thou art the most excellent ray; thou givest effulgence, grant it unto me." These ceremonies ended, the oblation comes next. It consists of tila flowers, barley, water, and red sanders wood. In the last place comes the invocation of the holiest text of the Veda, recited along with the trisyllable monosyllable and the names of the three lower worlds pronounced inaudibly a hundred or a thousand times, or as often as practicable, counted upon a rosary of wild grains, or of gems set in gold. Additional prayers are recited, and the morning worship of the sun is terminated. The religious duties, which fill up the remaining portion of the day, are chiefly comprised in what are called the five sacraments. The ceremonies of marriage are extremely numerous. The bride is first bathed, and then her hand is placed in that of the bridegroom, both having been previously rubbed with an auspicious drug. Funeral obsequies are performed no less than ninety-six times in every year, with cow-dung, sand, cusa-grass, water, clarified butter, and prayer.

In all nations men eat, drink, meet, converse, transact business, and sport together. But the manner in which these and other things are performed is as different as the nations are numerous into which the race is divided. So much of the entire business of life, among the Hindoos, consists in religious services, that the description of their religion is a history of the principal branch of their manners. The singular distinctions, attached to the different classes, present another remarkable feature in their manners. The lower orders, in other countries, are often lamentably debased; in Hindostan they are degraded below the brutes. With the exception of the Vaishya caste, to whom is assigned the business of agriculture and exchange of commodities, the whole of the productive classes, according to the standards of law and religion, are vile and odious, unworthy to eat, drink, or sit with a member of the classes above them. There are four prominent periods into which

with regard to the three honorable classes, human life is divided. Of these, the first is that of the student; the second, that of the householder; the third, that of the man who performs penance or religious acts, residing continually in a forest; the fourth, that of the Sannyasi, or the ascetic absorbed in divine contemplation. The period of the student commences at the era of investiture, and resembles much more closely that of an American mechanic's apprentice than that of a pupil in literature. To the state of the student succeeds that of the married man or housekeeper. Marriage is a religious duty, and that of the highest. Except for some grand plan of devotion, as that of remaining a student, or of becoming a Fakir,* no man neglects, at an early age, to fulfill this sacred obligation. As the sacrament of obsequies to the manes of ancestors can be performed only by a male descendant, and as any failure in these obsequies affects the spirits of the dead, to die without a son is regarded as one of the greatest of calamities. Nothing can exceed the habitual contempt which the Hindoos entertain for their women. Hardly are they ever mentioned in their laws, or other books, but as wretches of the basest and most vicious inclinations, upon whose nature no virtuous or useful qualities can be engrafted. Beating their wives is a common discipline. They are debarred the use of litters, and are held unworthy to eat with their husbands, and an almost unlimited power of divorce is reserved to him. The simplicity of the houses, dress, and furniture of the Hindoos, corresponds with that of their diet. The houses of the poor, even in towns, are built of mud, sometimes of brick, and thatched. The furniture, which is almost nothing in the houses of the poor, is in the highest degree scanty even in those of the rich. From the frequency and care with which the Hindoos perform religious ablutions, flattering conclusions are apt to be drawn in favor of their cleanliness. But few nations, however, are surpassed by them in the total want of physical purity in their streets, houses, and persons. Mr. Foster says of the streets of Benares: "In addition to the pernicious effect proceeding from a confined atmosphere, there is, in the hot season, an intolerable stench, arising from the many stagnant pools of water. The filth, also, which is indiscriminately thrown into the streets, and there left exposed, adds to the compound of ill smells so offensive to the European inhabitants of this city." "The Hindoo," says Mr. Scott Waring, "who bathes constantly in the Ganges, and whose heart equals in purity the whiteness of his vest, will allow this same white robe to drop nearly off with filth, before he thinks of changing it." "Their nastiness," says Dr. Buchanan, "is disgusting; very few of the inhabitants, above the Ghauts, being free from the itch."†

The Hindoos little courted the pleasures derivable from the arts, whatever skill they might have attained in them. Architecture, weaving, and jewelry are the only arts in which they have excelled; and even these, with the exception of weaving, remained in a low state of improvement. "The entry," says Dr. Robertson, "to the Pagoda of Chillambrum is by a stately gate,

* A sect of religious mendicants, who make pilgrimages, in almost an entire state of nudity, about the country, and swarm about the principal temples. It is customary for the women to kneel, and, as it were, to adore their secret, or rather public, parts.

† Say the authors of the *Universal History*:—"The women scruple no more than the men to do their occasions in the public streets; for which purpose, at sunrise and at sunset, they go out in droves to some dead wall, if in the city; and in case any pass by in the interim, they turn their backsides upon them, but hide their faces. When they have evacuated, they wash their parts with their left hand, because they eat with the right. The men exonerate apart from the women, and squat like the latter when they urinate. They leave such a stink behind them that it is but ill taking the air, either in the streets or without the towns near the rivers and ditches." Yet those authors assure us that the Hindoos are a cleanly people, because, and for the sole reason, that they wash before and after meals, and leave no hair upon their bodies.

under a pyramid 122 feet in height, built with large stones above 40 feet long and more than 5 feet square, and all covered with copper plates, ornamented with an immense variety of figures neatly executed. The whole structure extends 1,332 feet in one direction, and 936 feet in the other." Another structure still more remarkable, is the Pagoda of Seringham, which is thus described by Mr. Orme: "It is composed of seven square enclosures, one within another, the walls of which are 25 feet high and 4 feet thick. These enclosures are 350 feet distant from each other, and each has four large gates with a high tower, which are placed one in the middle of each side of the enclosure, and opposite to the four cardinal points. The outward wall is near four miles in circumference, and its gateway to the south is ornamented with pillars, several of which are single stones 33 feet long and nearly 5 feet in diameter, and those which form the roof are still larger. In the inmost enclosures are the chapels." In these specimens, nothing is described as worthy of regard, except the magnitude of the dimensions. Of one very necessary and important part of architecture, they were entirely ignorant. They knew not the construction of arches until it was taught to them by their Moslem conquerers. Of the exquisite degree of perfection to which the Hindoos have carried the productions of the loom, it would be idle to offer any description, as there are few objects with which the inhabitants of Europe and America are better acquainted. Whatever may have been the attainments, in this art, of other nations of antiquity—the Egyptians, for example, whose fine linen was so eminently prized,—the manufacture of no modern nation can, in delicacy and fineness, vie with the textures of Hindostan. It is remarked, at the same time, by intelligent travelers, that this is the only art which the original inhabitants of that country have carried to any considerable degree of perfection. To their skill in this art several causes have contributed. It is one of the first to which the necessities of man conduct him; it is one of those which experience proves to arrive early at high perfection; and moreover, it is an art to which the circumstances of the Hindoo were, in a singular manner, adapted. His climate and soil conspire to furnish him with the finest cotton which the earth produces. It is a sedentary occupation, requiring patience, little bodily exertion, and moreover, the slender and delicate frame of the Hindoo is accompanied with an acuteness of external sense, particularly of touch, which is altogether unrivaled, and the flexibility of his fingers is equally remarkable. The hand of the Hindoo, therefore, constitutes an organ, adapted to the finer operations of the loom in a degree which is almost peculiar to him. Agriculture, the most important of all the useful arts, is not the first invented, nor the first which arrives at perfection. It is allowed on all hands that the agriculture of Hindostan is rude; but the progress of agriculture depends so much upon the laws relating to landed property, that the state of this art may continue very low, in a country where other arts are carried to a high degree of perfection. A Hindoo field, in the highest state of cultivation, is described to be only so far changed by the plow as to afford a scanty supply of mold for covering the seed. Nothing can exceed the rudeness and inefficiency of their implements of agriculture. The plow consists of a few pieces of wood, has no contrivance for turning over the mold, and the share, having neither width nor depth, is incapable of stirring the soil. A harrow is described as literally a branch of a tree. The *hackery*, which answers the purpose of cart or wagon, is a vehicle with two wheels, which are not three feet in diameter, and are not unfrequently solid pieces of wood, with only a hole in the center

the axletree. To lessen the friction, the simple expedient of "*greasing the wheels*" never suggests itself to the *ryot** of Hindostan. The advances arising from the observation of the fittest season for sowing are almost entirely neglected. No attention is ever paid to the varieties of grain, the selection of the best, or their fitness for particular situations. For restoring fertility to an exhausted field, suspension of cultivation is resorted to. Fallow and rotation of crops are unknown. To separate the grain from the straw, the ancient method of treading with oxen has given way to no improvement; and for the most part, corn is still ground in hand mills by the women. The manufacture of brilliant trinkets, for the ornament of the person, is in which, at an early stage of society, acquires the greatest degree of excellence. The Hindoos cut the precious stones, polish them to a high degree of brilliancy, and set them neatly in gold and silver. This description of culture, however, cannot fairly be considered a mark of high civilization. As early as the time of Moses, the art of forming jewels had attained great perfection. In the ephod of Aaron, and in the breast-plate of judgment, were precious stones set in gold, with the names of the twelve tribes engraved upon them. The ancient Mexicans attained to great proficiency in this art. By any panegyrist, can it hardly be pretended that the sculpture, painting, and music of the Hindoos are in a state beyond that in which they appear in early stages of society. "They have," says Mr. Foster, "a slender knowledge of the rules of proportion, and none of perspective." "The laborious exactness," says Dr. Tennant, "with which they imitate every feather of a bird, or the smallest fibre on the leaf of a plant, renders them valuable assistants in drawing specimens of natural history; but further than this they cannot go. If the bird is to be placed upon a rock, or branch of a tree, a draughtsman is at a stand; the object is not before him, and his imagination can supply nothing." All Europeans agree in describing the music of the Hindoos as displeasing, and void both of expression and art. After a description of the extreme rudeness of the instruments of music of the people of Sumbhulpoor, Mr. Motte says, "the Rajah's band always put me in mind of a number of children coming from a country fair." In few climates is glass in windows more conducive to comfort than that of Hindostan; yet they have never learnt to indulge in this convenient article. Of its adaptation to optical purposes, they were so ignorant that they were astonished and confounded at the effects of a common spy-glass.

The literature of any nation is one of the sources from which the safest inferences may be drawn in regard to their civilization. The first formation of literature is poetry. At this first stage the literature of the Hindoos has scarcely remained. All their compositions, with wonderfully few exceptions, are in verse. Their laws, sacred books, works of science, and even their dictionaries, are in verse. "The Hindoos," says Mr. Wilford, "have no regular work on the subject of geography, or none at least that ever came to my knowledge. The Hindoo systems of geography, chronology, and history, are equally monstrous and absurd. The circumference of the earth is said to be 500,000,000 yojanas, or 2,456,000,000 British miles; the mountains are asserted to be 100 yojanas, or 491 British miles high. In the Calica Puraṇa, it is said that the mountains have sunk considerably, so that the highest are not above one yojana, or five miles high. When the Purāṇics speak of the kings of ancient times, they are equally extravagant. According to them,

*Land in Hindostan is held upon lease, in large divisions, from the sovereign by a class called *zamindars*, who sub-lease it to the *ryots*, or cultivators, in smaller divisions.

King Yudhishter reigned 27,000 years; King Nanda is said to have possessed in his treasury above 1,584,000,000 pounds sterling in gold coin alone; the value of the silver and copper coin and jewels exceeded all calculation; and his army consisted of 100,000,000 men." With respect to morals or duty, it does not appear that any theory has ever been constructed by them. The Hindoo astronomy is possessed of very considerable accuracy in regard to the mean motions. In other respects it has no pretensions to correctness or refinement. The Hindoos have institutions of education; and the Brahmins teach the arts of reading and writing by tracing the characters with a rod in the sand.

The nations of Europe became acquainted, at nearly about the same period, with the people of America and the people of Hindostan. The Hindoos were compared with the savages of America; the circumstances in which they differed from that barbarous people, were those in which they corresponded with the most cultivated nations; and it seems to have been little suspected that conclusions too favorable could possibly be drawn. The progress of knowledge, and the force of observation, demonstrated the necessity of regarding the actual state of the Hindoos as little removed from that of half civilized nations. As they have enlightened us by no record of antecedent events which we can rely upon, and we have thus no immediate proof of their state of civilization in past ages, the only sure ground of inference is the laws and institutions which they framed, the manners they adopted, and the arts and sciences which they cultivated. Their laws and institutions were adapted to the very state of society which we now behold. They were such as, so far from indicating a perfect state of society, seem entirely inconsistent with it; such as could neither begin, nor exist, under any other than one of the rudest and weakest states of the human mind. Our experience of human nature, and the phenomena which are exhibited under the manners, attainments, and institutions of the Hindoos, are the only materials from which a rational inference can be drawn. It is by no means impossible for a people, who have passed but a small number of stages in the career of civilization, to be united, extensively, under one government, and to remain steady for a great length of time in that situation. The empire of China is a prominent proof; the ancient kingdom of Persia, which for several ages stood exempt from revolution, is another. The Ottoman empire may be considered as a like example. And the Russians, a barbarous people, have long formed a very extensive monarchy. It would therefore be far from evidence of any higher civilization, among the Hindoos, than now exists, had the condition of a great monarchy been proved. Among uncivilized nations, however, it is most common to find a perpetual succession of revolutions, and communities in general small; though sometimes a prince or individual with uncommon talent arises, and, acquiring power, extends his authority over several of those communities; or even, as in the case of Charlemagne, over a great number, while, after his death, the large empire which he had erected gradually dissolves, until the whole, or the larger portion, is re-divided into petty communities as previously. Every thing which the Europeans have seen in Hindostan conspires to prove that such subdivisions of communities, and occasional and temporal extensions of power in particular hands, have composed the history of that country. By the division of the people into castes, and the prejudices which the detestable views of the Brahmins raised to separate them, a degrading and pernicious system of subordination was established among the Hindoos, and the vices

of despotism were there carried to a more destructive height than among any other people. By a system of priestcraft, built upon the most enormous and tormenting superstition that ever harassed and degraded any portion of mankind, their minds were enchained more intolerably than their bodies; in short, that, despotism and priestcraft taken together, the Hindoos, both mentally and bodily, have been the most enslaved portion of the human race. It was the interest of the despotism and the priestcraft to join together in upholding their common tyranny over the people; and it must be allowed that so commanding a motive had all the influence which it might be expected to have. The evidence adduced, and a comparison with the circumstances of other nations, warrant the conclusion, that despotism is more destructive of leisure and security, a less kindly nurse of civilization and refinement, and presents greater obstacles to the progress of the human intellect, than anarchy itself.

Art. II.—DEBTS AND FINANCES OF THE STATES OF THE UNION:

WITH REFERENCE TO THEIR GENERAL CONDITION AND PROSPERITY.

CHAPTER V.

The Middle States—Maryland.

Of all the States of the American Union, perhaps upon none has nature been more lavish of her favors than on the comparatively small State of Maryland. Its geographical position is every way of the most commanding character. Lying for a considerable distance along the banks of the Chesapeake, it incloses the head waters of that matchless estuary, and its shores on both sides are the recipients of the wealth discharged by the Susquehanna, which, rising in central New York, unites the waters of five great streams, draining a country two hundred miles in extent on either hand, and, after a course of four hundred and fifty miles, delivers the products of three States upon the bosom of the Chesapeake. The western boundary, following the course of the Potomac, embraces the most valuable mining region in the Union. Coal and iron are in limitless abundance, and gold has recently been discovered there. It is almost proverbial, that the soil of a mineral country is to the last degree sterile; but Maryland forms an exception to this rule. A mild climate of unsurpassed salubrity allows its inhabitants to cultivate a soil as remarkable for its fertility and the richness of its meadows as for its mineral wealth, abounding in all that region of which Cumberland is the key. The deep indentation of the Chesapeake Bay affords, on its western shore, a site for the chief town, Baltimore, nearer to the great western waters than that of any other Atlantic city; and the easiest route by which the tributaries of the Mississippi may be connected with the Atlantic, is that of the valley of the Potomac, around the sources of which stream are the richest mining and agricultural regions. These circumstances have impelled the State of Maryland to undertakings more gigantic than those of any other State in the Union, in proportion to population; and that which has absorbed most of her means, and involved her in the greatest difficulties, has been the Chesapeake and Ohio Canal.

The central position of Maryland among the original States, added to its

great local advantages, early indicated it as the most favorable locality for the seat of the federal government; and by acts passed in 1788 and 1789, Maryland and Virginia ceded a district ten miles square to the United States for a capital. General Washington took a great interest in promoting the welfare of this new city, which was to bear his name; and he presided at a meeting of commissioners, on behalf of the States of Maryland and Virginia, held at Annapolis December, 1784, to take measures for the improvement of the navigation of the Potomac. By an act of November, 1784, the Potomac Company was chartered in the District, with power to improve the navigation of the north branch of the river by cutting canals, rocks, and other works necessary thereto. In this company Maryland became a considerable stockholder. It was not, however, until 1820 that the idea of uniting Georgetown, in the District of Columbia, with the Ohio, at Pittsburg, a distance of 341½ miles, was first entertained. At that time General Bernard, celebrated as one of the most distinguished of the French engineers, was in the service of the United States, and his estimates, required for Congress, made the cost of the canal from Georgetown, up the valley of the Potomac, by Harper's Ferry, to Cumberland, \$9,195,457, a sum of such magnitude as to make legislators and capitalists hesitate in the undertaking. Other estimates were procured, however, from more flexible engineers, who made the cost \$4,500,000, half the sum set down by General Bernard. The result is, that the cost to Cumberland will not be far from \$14,000,000, which sum, allowing for the interruption, suspension, and corruptions incident upon great corporations, and which cannot come into the calculations of the engineer, fully justify the estimates of General Bernard. However, the false estimates of Geddes and Roberts, added to the influence of that patronage which always attends government undertakings, prevailed, and in January, 1824, Virginia passed an act incorporating the Chesapeake and Ohio Canal, to connect "the tide-water of the river Potomac with the navigable waters of the Ohio." This act conditioned, that as soon as the States of Maryland and Pennsylvania, Congress and the Potomac Company, should signify their assent, three commissioners should be appointed by each State and by Congress to open books in the District of Columbia to receive subscriptions to a capital stock of \$6,000,000, divided into 60,000 shares, the stock of the Potomac Company to be received in subscription to the extent of \$311,111. On the 31st of January, 1825, Maryland signified its assent to this law, and in the following March Congress did likewise. In the succeeding May the assent of the Potomac Company was accompanied by the surrender of its charter to the Chesapeake and Ohio Canal Company, and Pennsylvania subsequently subscribed to the law. In March, 1846, Maryland subscribed 5,000 shares to the stock, (\$500,000,) in addition to the stock and debts owned by the State in the Potomac Company, amounting to \$163,724 44, provided that Congress should first subscribe 10,000 shares to the Chesapeake Canal Company. This was done by act of Congress May, 1828. The town of Washington was authorized also to subscribe \$1,000,000, and Georgetown and Alexandria each \$250,000; Virginia appropriating a like sum, 6,084 shares being taken by individuals; the aggregate subscription would thus reach \$4,022,134. Maryland contracted a loan of \$262,500 to fulfill her share of it, and in 1830 a further loan of \$234,500 was made for the same purpose. On the 4th of July, 1828, ground was broken for the commencement of the canal with much ceremony by President Adams. From Washington to Harper's Ferry, 62

rules, the width of the canal is 62 feet; from that point to Cumberland 50 feet; depth, 6 feet; locks, 100 feet in length and 15 wide; and thus far the whole is executed in an admirable manner. The work progressed until 1834, when the whole of the money was expended and but 104 miles completed. In that year Maryland made a loan of \$2,000,000 6 per cent stock to the company, reserving the right of converting the loan into stock on the completion of the work to Cumberland, to effect which it was supposed this sum would be sufficient. In 1836, however, the additional sum had been expended, and new estimates showed that still \$3,000,000 would be required to reach Cumberland. Application was then made to Congress for further aid; but the dangerous policy of unlimited internal improvement by the federal government had attracted public attention, and received its death-blow from the vigilant Jackson. Congress, however, assumed the amounts (\$1,500,000) that had been subscribed by the towns of Washington, Georgetown, and Alexandria, and has since paid the interest and \$60,000 per annum of the principal, reducing the amount to \$1,020,000 December, 1848. Under those circumstances, and impelled by the then state of the markets, the State of Maryland subscribed the whole amount to the stock of the company, making its share about \$3,800,000, and \$2,000,000 of loan. This subscription was made in connection with one to the Baltimore and Ohio Railroad.

The scheme of constructing a railroad to connect Baltimore with the Ohio, to strike the latter at some point between Pittsburg and the mouth of the river Kanawha, was entertained as early as 1826; but the Baltimore and Ohio Railroad was not incorporated until February, 1827, by the Legislatures of Virginia and Maryland, and subsequently by Pennsylvania. This was then the most gigantic railroad ever projected; yet \$5,000,000 were immediately subscribed for its prosecution, the State of Maryland and the city of Baltimore each subscribing \$500,000. In December, 1834, the road was completed to Harper's Ferry, 82 miles, at an expense of \$3,000,000. At this point its progress was arrested by a judicial decision in favor of the canal, which had priority of right of way, and the road was not to pass beyond Harper's Ferry until the canal should be finished to Cumberland. The railroad, therefore, applied the balance of its means to the construction of the Washington and Baltimore Branch, and for this purpose the State added \$500,000 to its subscription, and issued a 5 per cent stock for the purpose. The railroad also required an appropriation of \$3,000,000 to prosecute its main line, on the removal of legal difficulties; and in order to meet this, as well as the above-mentioned additional loan to the canal, and \$2,000,000 to other companies, it was decided to issue what was called the eight million loan of sterling stock, or stock payable in London. The circumstances under which the eight million loan bill passed in 1835 give to it a force, and, to all the obligations it imposes, a solemnity, which do not belong to ordinary acts of legislation. The Legislature then assembled, impressed with the weight of the responsibility which rested upon them, and desirous of consulting the people in reference to a subject of such vast importance, resolved to adjourn, to meet again in extra session in May, that, in the interval, they might ascertain the will of those whose interests were so vitally concerned in the result. They accordingly did so adjourn, mingled together, and consulted with their constituents, and coming again fresh from the source of power, and clothed with their authority, passed the law under which this large addition was made to the public debt. It must be remembered, however, that the remotest idea that taxes were ever to be the result of this debt was never suffered to be alluded to. On

the other hand, the vast revenues to be derived from these works to enrich the State were the sole theme of newspaper discussion, stump oratory, and the estimates of contractors and jobbers—a vast army, eager to obtain the money that the people were urged to vote. The law was passed, and commissioners appointed to negotiate the loans. These commissioners did not, however, reach Europe until the great revulsion had crushed American credit, and they returned without being able to negotiate the bonds on the terms prescribed by the law. On their return they found the canal company pressed with heavy engagements, contracted in anticipation of the success of the commission, and ready to make any sacrifice of State credit and the people's money to save their own credit and to pay the contractors. The commission, therefore, agreed to deliver \$3,000,000 of stock each to the canal and the railroad. The Legislature, however, refused to sanction this, under the impression that the State credit would suffer from the necessities of the company. They assented, however, to a modification, by which the commissioners should deliver the bonds whenever the equivalent in money should be paid into the Treasury; but it permitted the delivery of \$2,500,000 to the canal company. This stock was hypothecated with banks and brokers, and sold for whatever could be got for it by them, thus discrediting the State, and diminishing the resources of the company. The means thus obtained were rapidly expended upon contracts, at a time when wages and prices were exorbitantly high.

In March, 1839, a fresh statement was submitted, showing that an additional \$3,000,000 would be required to finish the canal to Cumberland, and that, without such aid, the money already expended would be comparatively useless. It was then proposed that Maryland should do no more in the matter, unless the federal government and the district cities would surrender their interests to Maryland. As this was not agreed to, however, a further appropriation was made of \$1,375,000 in a 5 per cent sterling stock, making the State's share \$5,000,000 of stock, with the right of converting its loan of \$2,000,000 into stock. This new stock was squandered in the same manner that the previous emission had been, leaving the company heavily involved, without credit at home or abroad, amid general insolvency and loss of credit. These disastrous results caused a suspension of the works for some years, until the passage of a law in 1845 enabled the company to put the whole under contract to Cumberland, and it will probably reach that point in 1850, ten years later than was supposed. The Virginia Legislature have passed a law guarantying the bonds of the canal for \$200,000.

The Baltimore and Ohio Railroad Company conducted its affairs somewhat better. After the completion of the Washington Branch, it confined its operations to repairs and improvements; paying into the State Treasury the interest on the State stock and a fair sum besides, as a tax on passenger transportation over the Washington Branch. It had not pressed its share of the \$8,000,000 loan upon the market until 1839, when it began to make preparation to extend the work from Harper's Ferry to Wheeling, 292 miles, which it was estimated would cost \$10,000,000. The means of the company at that time for completing the road between these points consisted of State bonds for \$3,000,000, of Baltimore city stock for the same sum, of the subscription of the city of Wheeling for \$1,000,000, and of the contribution of Virginia, of two-fifths of the expenditures within her limits, estimated at \$1,338,000. It is understood that no payments are expected from Virginia or Wheeling till the road is completed to the Ohio.

In September, 1839, the president of the company went to England to negotiate the bonds, but succeeded only in arranging a system of hypothecation which was fortunately not carried out. In the execution of this trust, he deposited the bonds with Baring, Brothers & Co., who agreed to become the agents of the railroad company on the following conditions. They were to sell the bonds at certain prices, and to charge certain commissions, and were to allow the company, after February, 1841, to draw upon them for £10,000 sterling a month, under the limitation, that their advances were never to exceed £40,000 at any one time. They were at liberty to sell as much stock as might be required to cover these advances, without any restriction as to price or time. After thus reimbursing themselves, they were to permit the company to draw in like manner for similar sums; and this operation might be repeated until the bonds should all have been forced into the market for the payment of temporary loans. For some time before the bonds were sent to England, the scarcity of money, the abundance of American securities, and their rapid fall in value, made it impossible to effect a sale, or negotiate a loan on reasonable terms; and the introduction of so large an amount of Maryland stock into foreign markets, under such circumstances, and for so slight an inducement, was calculated to sink more deeply, if possible, the credit of the bonds which had been unfortunately pledged by the Chesapeake and Ohio Canal Company. These considerations eventually prevented the company from parting with the bonds, and it still holds the \$3,200,000 issued to it as part of the \$8,000,000 5 per cent sterling, under prospects that may now enable it to dispose of them to advantage. The net revenues of the work have been applied to construction, and the road is now under contract from Cumberland to the Ohio. It is estimated that the cost of the road to the Monongahela will be \$4,500,000. It is further estimated, that when the road is completed to that point, the gross income of the road would be increased one-half, or would amount to \$2,153,743, equal to 9 per cent on the aggregate cost of the line. The 5 per cent sterling bonds, amounting to \$3,000,000, would yield \$2,700,000. The revenue of the road, during the process of extension, would probably amount to \$1,300,000; and it is calculated that \$500,000 can be raised from the citizens of Baltimore. This would make the sum required (\$4,500,000) to carry the road to the Monongahela River, provided its revenues are kept up to the point estimated.

Although the Baltimore and Ohio Railroad was open to Harper's Ferry first in 1834, it was partially in operation in 1832, and the annual income during its existence has been as follows:—

REVENUE OF THE MAIN STEM OF THE BALTIMORE AND OHIO RAILROAD.

Years.	Passengers.	Tonnage.	Aggregate rev.	Expenditure.
1832.....	.....	.....	\$183,053 21	\$98,653 01
1833.....	.....	.....	191,673 92	83,880 75
1834.....	.....	.....	222,973 92	95,344 78
1835.....	\$98,540 22	\$169,827 88	263,368 10	108,179 50
1836.....	128,126 30	153,186 23	281,312 53	.....
1837.....	145,625 29	155,676 09	301,301 38	.....
1838.....	166,693 53	198,580 79	365,224 32	.....
1839.....	173,860 44	233,487 06	407,347 50	.....
1840.....	177,035 75	255,847 95	432,883 70	.....
1841.....	179,615 80	211,454 07	391,069 87	.....
1842.....	181,177 35	215,315 31	426,492 66	.....
1843.....	274,617 27	300,617 81	575,235 08	.....
1844.....	336,876 32	321,743 60	658,619 98	.....

REVENUE OF THE MAIN STEM OF THE BALTIMORE AND OHIO RAILROAD—CONTINUED.

Years.	Passengers.	Tonnage.	Aggregate rev.	Expenditure.
1845.....	369,882 30	868,720 88	738,603 18	.....
1846.....	.....	.....	797,064 00	424,773 00
1847.....	.....	.....	1,101,936 68	590,829 68
1848.....	.....	.....	1,212,664 67	662,106 50

It is a usual estimate, warranted by experience, that the expenses of working a railroad equal half its revenues.

The Baltimore and Susquehanna Railroad opened in 1838, running from Baltimore, 60 miles, to York, in Pennsylvania; thence connected by the York and Wrightsville Railroad, 13 miles, with the Columbia Railroad. It cost, including the Westminster Branch, \$3,370,000, being 9,000 shares at \$50, of which the State subscribed, by four several acts, \$2,232,045 29. The last loan was granted to enable the company to pay its debts, and finish the road to Wrightsville, and thus form a connection with the Pennsylvania works. The commissioner of loans was directed to sell the bonds issued for the company. Having sold a part, he detained the rest in his hands, because they could not be sold without loss. As the company could derive but little advantage from this loan, for which it had consented to important modifications of its charter, it made an arrangement with the city of Baltimore for the loan of city stock to a sufficient amount to complete the road to Wrightsville.

The State subscribed \$1,000,000 to the Eastern Shore Railroad, on the condition that other *bona fide* subscriptions should be made to a sufficient amount to complete the road; but the work has been suspended throughout the line, and but a small portion of the stock authorized was issued.

The Annapolis and Elk Ridge Railroad Company received a subscription from the State of \$300,000, a part of which was paid in money, and a part in bonds. The Tide-Water Canal Company received, in pursuance of the act of the session of 1838, a loan of \$1,000,000 in State bonds, which were negotiated at the United States Bank, and afterwards transmitted to England, with other securities, to meet the engagements of that institution. The canal is now finished. It connects the Pennsylvania canals with the Chesapeake Bay, and forms an important link in the chain of inland communication between the different States of the Union.

The embarrassments into which the State was drawn by this system of improvement, exaggerated by the deceptive and culpable manner in which the affairs of the canal were managed, resulted in such a deficit in revenue, that when the foreign markets were no longer open to the sale of stock, the payments of the interest on the debt became impossible, and as no system of taxation had previously existed in Maryland, the same difficulties in levying and collecting a tax which had been experienced in Pennsylvania, were encountered in that State. The revenue of the State would meet only its current expenditure, and it became necessary to raise the whole interest of nearly \$600,000 per annum by taxation. Although it had thus become evident, at the close of 1840, that taxes were inevitable, at the session of 1841 the Legislature were disposed to dodge the question by means of false estimates and chimerical paper speculations, but were finally compelled to begin an efficient movement by passing a law March 23, 1841, which, with its supplement, enacted in the December following, imposed a tax for the first year of 20 cents, and for the next three years of 25 cents on the \$100 of assessed value of real and personal property. These were estimated to yield \$456,000 per annum. In aid of this tax other laws were passed, expected to realize \$200,000; and taxes imposed upon

silver plate, watches, &c., added to the interests expected from the Chesapeake and Susquehanna Railroad and the Susquehanna and Tide-Water Companies, would, it was confidently said, add to the resources of the State \$5,000. All these estimates proved fallacious, mostly from causes which would be the result of the commencement of a system of taxation. Thus ship-owners claimed the constitutionality of a tax on tonnage, and three years were required to establish the right to tax. The banks also contended that they were exempt from taxation, and legal decision against them required time. It is recollected that, prior to the act of March, 1841, the largest amount of direct taxation ever levied upon the people of Maryland in any year was \$60,818, and that even that imposition was continued but a few years, surely it can be no matter of surprise, that apprehension of the power of the State to raise, in this way, upwards of \$600,000, should have been entertained, and this apprehension operated very injuriously upon the people to resist what they supposed would ultimately not be enforced. In the case that, under the impression that no serious attempt to pay the interest would be made, the several companies that had received from the State held back in their payments, showing, with the usual bad faith of corporations, an evident disposition to cast off the obligation to the State by throwing the odium of repudiation upon the State at large. When the direct tax was levied, the property of the State was estimated at \$3,000. If this estimate had been correct, the rate of tax then imposed would have been sufficient. When, however, the actual value of the property was ascertained to be \$190,723,788, subsequently reduced to \$184,645 by the action of the appeal tax courts, there was no alternative but to increase the rate of the levy from twenty to thirty cents on the hundred dollars to secure an income from the ascertained value of the property of the State equal to that intended to be collected upon its estimated value. Instead of doing this, the Legislature undertook to rely upon other sources of revenue, and the direct tax was at all times be regarded only as the means to supply those deficiencies. The regular annual income from the direct tax, necessarily arising from the payment, insolvencies, and other causes unforeseen and inevitable. A fatal error was committed in failing to enforce the laws against delinquents. Forbearance and indulgence towards those, engaged the public mind a doubt as to the existence of a fixed and steady system to maintain inviolate the public faith. In this state of things others were encouraged to follow the example of the delinquents, and it resulted that even counties the tax laws are not at all enforced, and in January, 1857, the State failed to pay its interest. This was a serious blow to America, because Maryland in the year 1837, when there was a general bank panic, and no currency in the Union but bank paper, stepped forward and passed a law ordering that the State creditors should be paid in gold and its equivalent, and this law was made retrospective. By this means an example was set, and it is to be regretted that it was lost on Pennsylvania, inasmuch as that State is now the only one in the Union that could not defraud its creditors by paying in depreciated paper. In 1844 a law was passed subjecting the stock of non-residents to taxation, and the law was directed "to retain the tax out of the interest falling due on the bonds in each year, and to authorize the commissioner of loans to draw the balance of interest after deducting the tax." The justice of taxing the stock of foreigners is questionable, although England herself does so.

This great calamity led to more strenuous efforts in the adjustment of the tax laws, and the more effective disposition of the authority for the enforcement of the payments. Efforts were indeed made to induce the popular belief that the State was not morally or legally bound for the payment of the debt. The argument advanced was not like that of Mississippi, that the law authorizing the debt had been passed in a manner that violated the constitution, and that even the plain provisions of that law had been disregarded; but it was denied that the Legislature had the power to contract debts for such a purpose at all. There is an article in the Bill of Rights of the State of the following tenor: "Every person in the State ought to contribute his proportion of public taxes for the support of government, according to his actual worth in real and personal property." The argument drawn from this clause was, that the Legislature has power to tax the people *only* "for the support of government;" that the construction of railroads and canals is not one of the legitimate objects of government, and, therefore, it is not within the constitutional power of the Legislature to tax the people to pay for them. Absolute repudiation on any ground was not, however, popular, and payment in some way was felt to be necessary; nevertheless, the anxiety to avoid an increase of taxation induced attempts to sell the State interest in the public works, and in March, 1843, a law was passed to sell the following works at the sums annexed:—

Chesapeake and Ohio Canal....	\$5,000,000	—Payable in 5 per cent State bonds.
Baltimore and Ohio Railroad } .	4,200,000	" " " "
Washington Branch Railroad } .		
Susquehanna Railroad.....	1,500,000	" " " "
Tide-Water Canal.....	1,000,000	" " " "
Total.....	\$11,700,000	

This remained a dead letter upon the statute books. Not only was no offer made which the Treasurer felt justified in accepting, but the enactment of the law was held to be a violence done to a preceding solemn engagement of the State. By the 64th section of the act of March session, 1841, chap. 23, a deliberate promise was made to keep at the Treasury an accurate account of the revenue paid by the city of Baltimore,* Howard District, and the several counties, and to transfer to them respectively an equivalent amount of the stock of the State in the Chesapeake and Ohio Canal Company, whenever that company should be prepared to make a dividend of *six per cent* to its stockholders. Notwithstanding these efforts, the sense of the people evidently tended towards payment, and with the improvement of business generally, as the country emerged from the disastrous effects of the great collapse of the credit system which attended the final explosion of the great corrupt institution that, as United States National Bank, allured Pennsylvania to bankruptcy, the taxes were more readily paid and the machinery for collecting them worked more smoothly. The actual produce of the taxes gradually approximated the estimates, and the reduction in the State expenses, by

* The entire stock debt of the city of Baltimore, for which certificates have been issued, amounts to \$3,493,773 03. In this amount is included the Court-House Loan of \$100,328 07, for the payment of the principal and interest of which there is a special levy. The purposes for which this debt was incurred, and the amounts of each, are as follows:—

Baltimore and Ohio Railroad Company.....	\$3,637,215 30
Susquehanna Railroad Company.....	950,000 00
Susquehanna and Tide-Water Canal Company.....	300,000 00
Court-House Loan.....	100,328 07
For other purposes.....	426,319 06

curtailing many outlays, enable a large amount to be appropriated to interest. When the State could no longer pay the interest coupons as they fell due, it had allowed them to be received for taxes, and by this means a considerable amount came annually into the Treasury, diminishing by so much the accumulation of arrearage interest.

The progress of the revenues, as well from taxes as the increasing ability of the several companies to meet the interest on the amounts loaned them by the State, and to pay dividends on what stock the State owned in them respectively, enabled an increasing amount of interest to be paid annually; and it appears that, during the year ending December 1st, 1844, the Treasurer paid on account of interest \$305,059, being less than one year's interest by the sum of \$260,361. For the year ending 1st December, 1845, the Treasurer paid for interest on the public debt the sum of \$710,784, being more than one year's interest by the sum of \$55,363. For the year ending 1st December, 1846, the Treasurer paid, on account of interest, \$732,289, being \$76,868 more than the accruing interest for the year.

It now became evident that the finances had worked up to a position which would permit of resumption. At the session of 1846 a bill was introduced into the House of Delegates authorizing a sale of the bank stock owned by the State, and amounting to \$510,966, to apply the proceeds to arrears of interest, and to resume cash payments April, 1847. This was lost, 36 to 35; reconsidered by a vote of 35 to 31; and finally passed, 45 to 25. It failed, however, in the Senate, by a vote of 9 to 8. At the session of 1847, however, the matter was resumed, and a law was passed of which the following is a synopsis:—

MARYLAND RESUMPTION LAW.

Sec. 1. Directs the State Treasurer to resume payment of the current interest on the public debt on the 1st of January, 1848.

Sec. 2. Authorizes and directs the commissioner of loans, after October 1, 1847, to issue 6 per cent bonds, interest payable annually upon application therefor, to the holders of coupons or certificates of interest. The interest on the main debt to be first paid; and if then, after defraying the ordinary expenses of the State, there should not remain in the treasury funds adequate to pay the full amount of 6 per cent interest on the bonds, then what does remain shall be appropriated *pro rata* among said bonds, and certificates given for the balance due.

Sec. 3. Directs the commissioner of loans to keep a record of the bonds, their date and amount, and to whom issued, and to furnish a copy of the record to the Governor and State Treasurer on the 1st of December of each year, to be by them transmitted to the Legislature.

Sec. 4. All taxes and State dues to be paid in current money.

Sec. 5. In case of temporary deficiency in the treasury, the Treasurer is authorized to borrow, on the hypothecation of the bank stock belonging to the State, the amount to supply such deficiency, to be repaid out of the first proceeds from revenue which may thereafter come into the treasury.

Sec. 6. Any surplus not required for the ordinary expenses of the State, on the main debt, or interest bonds, or certificates given for unpaid interest of the latter, shall be applied first to the payment of such interest in arrear as may remain unfunded, and after such unfunded interest is entirely discharged, either to the purchase or redemption of the bonds issued for arrears of interest under the second section of the act.

Sec. 7. Repeals all former provisions inconsistent with this act.

This law was carried into effect, and resumption took place January, 1848. The amount of arrears funded by its provisions has been \$854,003 43 in a 6 per cent stock, redeemable at the pleasure of the State. The following table indicates the progressive results of the tax laws upon the State revenues, and the payments made annually on account of interest, together with the

amount of arrearage interest outstanding at the close of each fiscal year, and the cash balance in the Treasury.

AGGREGATE REVENUES AND EXPENDITURES OF THE STATE OF MARYLAND.

Years.	REVENUE.		Total		EXPENSES.		Balance	Arrears of
	Direct taxes.	Other sources.	revenue.	Interest.	Other.	Total.	on hand.	at close of year.
1842.....	\$367,332 51	\$313,196 30	\$680,428 81	\$273,376	\$392,594	\$665,970	\$73,217	\$658,856 00
1843.....	376,332 79	367,146 72	743,479 51	395,060	348,464	635,594		1,171,872 00
1844.....	507,781 04	458,707 96	966,589 00	710,784	337,704	948,488	199,412	1,450,961 00
1845.....	523,049 75	394,838 04	917,887 79	733,390	235,961	969,351	148,048	1,376,281 00
1847.....	769,821 88	603,089 04	1,374,903 92	936,667	267,786	1,194,453	229,699	1,398,823 00
1848.....	548,018 89	452,553 40	1,000,572 29	751,166	261,900	1,012,196	215,945	\$54,903 43

Of the receipts in 1847, \$723,610 were in coupons; and of 1848, \$47,087 85 were in coupons. This increase of revenues has been nearly as great from other sources of income, particularly from the increasing prosperity of the public works, as from the direct taxes. A gratifying feature of the state of affairs is the increasing value of the taxable property of the State. The valuation of \$190,723,788 for 1841 was, as we have stated, reduced, by the action of the appeal tax courts, to \$177,139,645 for 1844. This has again risen to \$191,214,252 for 1848. The property of the State consists of the following items:—

PROPERTY OWNED BY THE STATE OF MARYLAND.

PRODUCTIVE.

Stocks of the Farmers' Bank of Maryland.....	\$190,000 00
“ Bank of Baltimore.....	174,000 00
“ Mechanics' Bank of Baltimore.....	46,500 00
“ Union Bank of Maryland.....	31,800 00
“ Hagerstown Bank.....	25,000 00
“ Commercial and Farmers' Bank of Baltimore.....	21,666 66
“ Farmers' and Merchants' Bank of Baltimore.....	12,000 00
“ Marine Bank of Baltimore.....	10,000 00
“ Franklin Bank of Baltimore.....	7,500 00
“ Baltimore and Ohio Railroad Company.....	1,050,000 00
“ Baltimore and Fredericktown Turnpike Road Company	10,000 00
“ Baltimore and Yorktown Turnpike Road Company....	5,000 00
“ Union Manufacturing Company.....	10,000 00
Bonds of the Susquehanna and Tide-Water Canals.....	1,000,000 00
Loan to the Trustees of Charlotte Hall School.....	2,644 77
Due from the Sheriffs, Clerks, Collectors, Inspectors, and Auctioneers	662,813 68
Bonds of the Susquehanna and Tide-Water Canal Companies.....	192,500 00
Total productive.....	\$3,451,477 11

UNPRODUCTIVE.

Bonds of the Chesapeake and Ohio Canal Company.....	2,000,000 00
“ Baltimore and Susquehanna Railroad Company.....	1,884,045 29
Loan to the President and Directors of the Potomac Company.....	30,000 00
Interest thereon to 16th May, 1825.....	13,280 00
Stock of the Potomac Company.....	120,444 44
“ Baltimore and Ohio Railroad Company.....	3,000,000 00
“ Chesapeake and Ohio Canal Company.....	5,000,000 00
“ Chesapeake and Delaware Canal Company.....	50,000 00
“ Baltimore and Susquehanna Railroad Company.....	100,000 00
“ Annapolis and Elk Ridge Railroad Company.....	299,378 41
“ Eastern Shore Railroad Company.....	86,862 00
“ Nanticoke Bridge Company.....	4,233 33
“ Chesapeake Steam Towing Company.....	25,000 00

* Funded.

† Subscribed for deferred Stock of the Chesapeake and Ohio Canal Company, in pursuance of ch. 189 of 1825, sec. 12.

the Elkton Bank of Maryland.....	\$10,000 00
not installed and not installed—exclusive of interest.....	10,759 33
the Chesapeake and Ohio Canal Company—for interest.....	3,274,318 57
Baltimore and Susquehanna Railroad Co.—for interest.....	925,905 76
any—for premium, principal and interest.....	59,096 64

unproductive.....	\$16,990,623 95
total.....	20,442,071 06

debt of the State of Maryland, originating as has been described, in small loans contracted for the University, the Penitentiary, and the Tobacco Warehouse, amounts in gross to the sum of \$388 43. From this is to be deducted the \$3,200,000 not issued by the Baltimore and Ohio Railroad. There is also \$1,050,000 of stock in the Baltimore and Washington Branch, the interest on which is more than met by the dividends and capitation tax on passengers. The interest on the \$1,000,000 issued to the Susquehanna Canal is paid by that canal. These items make \$5,348,000 provided for, and there remains \$388 of debt on which the interest is to be met. Of this amount the State owns \$1,780,000 as a sinking fund, and therefore the interest paid on the debt is in fact an extinguishment of a much larger amount of debt. The following are the details of the debt:—

DEBT OF THE STATE OF MARYLAND JANUARY 1, 1890,

SHOWING THE SEVERAL LOANS OF THIS STATE, THE ACT OF THE GENERAL ASSEMBLY AUTHORIZING THEM, THE RATE PER CENT OF EACH, THE PERIOD WHEN REDEEMABLE, AND THE RESPECTIVE AMOUNTS.

Chesapeake and Ohio Canal.

Chap.	Rate.	Time payable.	When red.	Where.	Amt. of Loan.
105	5 per cent.	Quarterly.	1848	Loan Office.	\$262,500 00
46	5 "	"	1843	"	234,500 00
239	5 "	"	1843	"	125,000 00
241	6 "	"	1871	"	2,000,000 00
395	6 "	"	1885	"	35,000 00
386	5 p. c. ster.	Semi-annual.	1890	London.	2,162,666 66
396	5 "	"	1890	"	1,375,000 00
					\$7,194,666 66

Baltimore and Ohio Railroad.

104	5 per cent.	Quarterly.	1848	Loan Office.	\$256,189 00
46	5 "	"	1843	"	115,811 00
105	5 "	"	1843	"	125,000 00
386	5 p. c. ster.	Yet in hands of Company.			3,200,000 00
					\$3,697,000 00

Baltimore and Washington Branch.

33	5 per cent.	Semi-annual.	1859	Loan Office.	\$500,000 00
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Baltimore and Susquehanna Railroad.

119	4½ p. cent.	Quarterly.	1846	Loan Office.	\$100,000 00
241	6 "	"	1871	"	1,000,000 00
302	3 "	"	1890	"	500,000 00
395	5 "	"	1890	"	88,710 97
20	6 "	"	1890	"	543,324 32
					\$2,232,045 29

Susquehanna and Tide-Water Canal.

416	Star. 5's	Semi-annual.	1890	London.	\$1,000,000 00
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Annapolis and Elk Ridge Railroad.

When created. Session.	Chap.	Rate.	Time payable.	When red.	Where.	Am't. of Loan.
1838.....	386	Ster. 5's	Semi-annual.	1890	London.	\$60,000 00
1889.....	12	Con. 5's	Quarterly.	1890	Loan Office.	159,724 45
Total.....						\$219,724 45

Eastern Shore Railroad.

1838.....	386	Ster. 5's	Semi-annual.	1890	London.	\$60,000 00
1889.....	323	Con. 5's	"	1890	Loan Office.	81,406 77
1841.....	6	6's	"	At pleas.	"	11,300 87
Total.....						\$152,706 14

Interest Arrears Funded.

1846.....	238	5 per cent.	Annually.	At pleas.	Loan Office.	\$854,003 43
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Maryland University, Medical Department.

1821.....	88	5 per cent.	Quarterly.	1851	Loan Office.	\$30,000 00
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Penitentiary.

1821.....	150	5 per cent.	Quarterly.	1851	Loan Office.	\$27,947 30
1826.....	229	5 "	"	1843	"	30,000 00
1834.....	308	5 "	"	1855	"	20,000 00
1886.....	300	6 "	Semi-annual.	1857	"	20,000 00
Total.....						\$97,947 30

Tobacco Warehouse Loan.

1835.....	350	6 per cent.	Semi-annual.	Contingent.	Loan Office.	\$30,000 00
1843.....	310	6 "	"	At pleasure.	"	30,000 00
1845.....	97	6 "	"	"	"	25,000 00
1845.....	97	6 "	"	"	"	20,000 00
1845.....	97	6 "	"	"	"	23,000 00
1846.....	348	6 "	"	"	"	20,000 00
1845.....	97	6 "	"	"	"	13,984 16
Total.....						\$161,984 16
Grand total.....						16,140,038 43

The whole of the sterling debt bears an interest of 5 per cent per annum, which is payable in London semi-annually, on the 1st January and 1st July, by the Messrs. Baring. It is in the form of bonds, with coupons attached, transferable from hand to hand. This stock, by an act of the session of 1847, is convertible, at the rate of \$4 84 to the £ sterling, into a 5 per cent currency stock, payable quarterly at the Loan Office, Baltimore; and more than \$500,000, say £110,000, have been so converted.

The interest on all the currency stock is payable by the State, the several companies agreeing to reimburse the State for sums paid on their account at the Loan Office in Baltimore; the quarterly on the 1st January, 1st April, 1st July, and 1st October; the semi-annual generally on the 1st January and 1st July. The 3 per cent stock is in the form of bonds, with coupons; the residue nearly all in Loan Office certificates, without coupons, and transferable only at the Loan Office. The amount of interest payable in London in 1848 was \$311,161 60; in Baltimore, \$349,529 50.

The State has a sinking fund, composed originally almost entirely of premiums on stocks issued. It was pledged, by investment and reinvestment,

the redemption of the several loans. The fund is active, and operates with a best success. It has been as follows :—

OPERATION OF THE SINKING FUND.

	State Stock.				Total		Cash.	Total.
	6 per cent.	5 per cent.	4 p. ct.	3 p. ct.	State stock.	Bank stock.		
1838.	\$432,000 00	\$378,173 30	.....	\$100,000	\$910,173 30	\$90,800	\$33,407 85	\$963,380 15
1844.	578,562 31	559,286 65	.....	111,000	1,248,858 96	90,800	6,547 83	1,376,306 79
1845.	.....	.....	.....	.....	.....	.....	.....	1,404,030 28
1846.	.....	.....	.....	.....	.....	.....	.....	1,515,257 00
1847.	.....	.....	.....	.....	.....	.....	.....	1,642,934 00
1848.	665,980 98	963,730 15	\$904 64	156,000	1,789,925 77	.....	15,870 07	1,786,512 14

The income of this fund is applied to the purchase of stock. There is a separate sinking fund for the discharge of the debt for the Tobacco Inspection, derived from the Tobacco Inspection revenue. The preservation of this fund through all the difficulties that have beset Maryland is now exhibiting fruits. It has reached an amount which, kept active by the regular payment of its dividends, enables it to sink \$150,000 of the debt per annum. In the operation of the sinking fund, it may be stated with absolute certainty that, if the tax laws now on the statute book remain unrepealed, and even if their product and the income from the public works does not increase, the whole present debt will be discharged in twenty years.

When we reflect that the great difficulty which beset Maryland, viz., the primary fault of neglecting that sound principle of finance which enjoins the contraction of no debt without setting aside some specific revenue, derived from a tax or other efficient source, to meet the principal and interest, has now been remedied by rigorous construction and enforcement of a system of taxation where none previously existed, and which has produced in the last two years more than the amount of the current interest, we become convinced of the impregnable position of her finances. By the voluntary action of the people, laws are in force that yield more than sufficient to cover the whole debt, interest and principal, and State expenses. In addition to this, the State has \$3,451,477 of productive property, annually increasing in profits, and it holds \$12,000,000 of stocks and bonds that must ultimately and speedily yield revenue from the operation of the general advancement of the nation's prosperity. It results from these general elements that Maryland is second to no State in the Union, or the world, in credit and resources.

In concluding remarks upon the success with which Maryland has cleared her financial difficulties, and constructed two of the most important works on this continent—works which will speedily relieve the people of the burdens that now oppress them, it must be remembered that a great portion of her success is due her able Treasurer, D. Claude, Esq., who for many years has managed the finances with signal ability, and to whom we are indebted for many of the facts here recorded. His annual reports evince untiring vigilance, always indicating, clearly and concisely, the legislative action required to promote the interests of the State.

ART. III.—COMMERCE OF CENTRAL AFRICA.

THE attention of the English has long since been directed to the commerce of Central Africa. This has been one of their avowed objects in the many arduous and disastrous attempts which they have made to explore the country. But with all their efforts, they have effected very little. An Englishman may still exclaim, as one of their writers did a few years ago, "We have failed most signally and completely, after spending so much treasure" (McQueen.) They attribute this failure, so far as regards the commerce of Central Africa, to the poverty of the country in commercial resources, and to the extreme insalubrity of the climate. But there are good reasons to believe that the English, after all, have come to a premature conclusion; and that it would have been, and would yet be, a comparatively easy task, to open an extensive and lucrative trade with Central Africa. The design of this paper is to show that Africa abounds in valuable commodities, which may be obtained without great difficulty.

The gold mines of this country have sent their tribute to the distant shores of the Mediterranean from time immemorial. "In the time of Herodotus gold dust was an article of commerce with the caravan merchants who visited the negro countries. He describes quite minutely the manner in which the natives obtained it, and the process is nearly the same as that practiced by them at the present day." (*Afric. Repos.* xiii., 271.) If it were necessary, we might make it apparent, I suppose, that ancient commerce drew many other articles from Central Africa, as well as gold. But however this may be, it is well known that the interior of Africa now affords a variety of valuable exports, some of which find their way into every part of the civilized world. A number of facts and details on this subject are found in Macgregor's Commercial Statistics. It appears that the Barbary States export to Europe considerable amounts of valuable commodities which are brought from the desert and from Sudan. In return they receive European goods, part of which are carried into the most interior portions of the continent, and sold several hundred per cent above their original cost. "The articles required by Central Africa from the ports of the Mediterranean are furnished chiefly by Marseilles, Leghorn, Venice, Trieste, and the entrepôts of Malta and Gibraltar." (*M. de Montveran*, as quoted by Macgregor, vol. ii., p. 300.) Among these articles, he enumerates silk manufactures, cotton cloths of various kinds, glass wares, false corals, coral beads, bracelets, gold lace, hardware, and tobacco.

Central Africa has considerable traffic not only with the Barbary States, but also with Egypt, with the eastern parts of the continent, and with the Atlantic coast. It is a fact worthy of particular notice, that a great part of the commodities exported from the Western Coast are produced in the interior. Dr. Hall has very justly asserted that "the natives on the coast are for the most part only factors of the people in the interior, having no capital of their own to trade on." The white traders on the African coast receive their profits from the partially civilized nations in the interior, who are the principal producers and consumers; but hitherto this traffic has been clumsily conducted, through the agency of the degraded barbarians on the coast. No one can doubt the advantages which would result from a direct trade with the interior by means of the Niger. The caravan trade with Barbary, Egypt, the coast, &c., would soon be greatly diminished, if not annihilated.

the exports of Central Africa always pass into the hands of ignorant arrians, it is impossible to estimate their amount. But we may say that the ascertained facts on this subject are comparable to grains of gold lying in their native bed of sand. Little as we know of the country, we are sure that it has immense resources. We quote again from Macgregor's statistics, however, embrace some articles which belong principally to the coast. "From 90,000 to 100,000 quintals of palm oil, valued at 10,000, are annually exported to Great Britain for the soap manufacture." "Senegal is exported to different countries, to the amount of 25,000 tons, which, at £4, amounts to £100,000." "The English and French export about 52,000 kilogrammes of wax from Senegal, of the value of £20." "Copper ore is taken from Mandara and the Mountains of the north, and exported to the coast by caravans." "Gold dust is an important article of commerce." There are four principal gold districts, and "the produce of these is estimated at from 60,000 to 70,000 ounces, at £4 per ounce." "The quantities are exported to Morocco. The natives also manufacture it into beautiful chains and other ornaments for themselves. Many parts of the country abound in iron, which is wrought with considerable skill by the natives. In one region are seven towns, almost wholly employed in the manufacture of iron and steel.

The value of the articles exported from Central Africa to Morocco have been estimated at £2,000,000, but this is probably exaggerated." In fact, it is not possible even to approximate the value of these exports. Some notion of their extent may be formed, however, by a glance at the caravan trade. Macgregor speaks chiefly of the trade on the Sahara. "These vast deserts are traversed by six lines of commercial communication, by means of caravans, generally consisting of from 1,800 to 2,000 camels; five of these are directed north to south, and one from east to west." (Vol. ii., p. 299.) He has also added that a multitude of other caravans, of all sizes and directions, are constantly traversing the country in every direction. We may mention the canoe trade on the lower Niger and Shary, and in the vicinity of Timbuctoo. Caille states that this great mart stands several miles from the Niger, and that its port on the river contains 1,200 inhabitants, who are wholly employed in transporting merchandise to and from the city. "Many of the canoes are boats of considerable size, and in the low country they are often armed with a six pounder in the bow.

On page 314, *et seq.*, Mr. Macgregor gives tabular views of the exports of Central Africa to Britain and Western Africa, from which we may infer something of the amount of African produce received in return. In one year these exports amounted to almost £3,000,000. In this estimate, no account is taken of the trade between the Western Coast and France, Portugal, and other countries. The value of a few of the principal articles exported was nearly as follows:—Unmanufactured tobacco, £1,600,000; beads, £350,000; cotton cloths, £280,000; arms, powder, &c., £104,000. It may be interesting to the American to observe, that the heavy leaf tobacco of Virginia is more in demand than any other article. Doubtless, if they had opportunity, the Americans would annually purchase the whole crop of Virginia. But this profitable branch of business is taken out of the hands of the Americans by their more enterprising neighbors, the English.

The following extracts are from articles on Africa, in the African Repository:—

Many false and even absurd statements have been current in reference to

this part of the world. An authority no less respectable than M'Culloch's Commercial Dictionary, has given a random estimate of the Western African trade at from £40,000 to £60,000 *per annum*." But Mr. Martin, in his History of the British Colonies, has given facts, collected from the custom-houses, which show that a *single house* in England imported in one year, gold, gums, ivory, wax, &c., &c., of the value of "£92,257, or nearly double the amount attributed by Mr. M'Culloch to the whole of Western Africa." The English trade in palm oil alone, in one year, has been "equal to £354,200, or more than \$1,700,000." "Many other facts of a similar nature are given by Martin." (Vol. xiii., p. 270.) We must still bear in mind that much of the trade of the coast comes from the interior.

Quotations are made from an English work by Mr. Buxton, showing that "Central Africa possesses within itself everything from which commerce springs. No country in the world possesses nobler rivers, or more fertile soil; and it contains a population of fifty millions." "Its natural productions and commercial resources are inexhaustible. From the testimony of merchants whose enterprise has for many years past led them to embark capital in the African trade, and from the evidence furnished by the journals of travelers into the interior of the country, we gather that nature has scattered her bounties with a most lavish hand, and that what is required to make them available is a legitimate commerce, sustained by the government, and directed by honorable men."

"The woods of this continent are extremely valuable. Travelers enumerate not less than forty different species of timber, which grow in vast abundance, and are easily obtained; such as mahogany, teak, ebony, lignum vite, rosewood," &c. Martin mentions thirty-eight different kinds of wood, which "have already become regular articles of export to England." "The grain of several of these woods is very rich, and furniture made therefrom is not only durable but extremely beautiful." "Of dye woods there are also abundance yielding carmine, crimson, red, brown, brilliant yellow, and the various shades from yellow to orange, and a fine blue." (Vol. xvi., pp. 9, 10.) Mr. Buxton also enumerates a variety of valuable gums, nuts, fruits, and grains, to which might be added a long list of miscellaneous articles.

From the statements which we have now made, it is evident that the failure of the English to open a direct trade with Central Africa cannot be justly attributed to a want of valuable productions in the country. These are abundant, as their own standard authors declare. Yet when English expeditions ascended the Niger and Shary, they found no commercial cities in which the productions of the country were accumulated. But did they expect to find cities of this character? It is well known that there are many commercial cities in the country, some of whose walls are thirty or forty miles in circuit, and whose markets are annually visited by thousands of persons from distant places. But these cities are not on the rivers, because the greater part of African commerce is carried on by means of caravans, and not by inland navigation. While the disappointed English were groping about the dirty towns of the low country, looking for a traffic which had never been there, the wealth of Africa was being transported by thousands of camels and other means of conveyance, along every public road of the interior, and far away to Egypt and Nubia, to the Barbary States, to the Western Coast, and to the distant nations which border on the Indian Ocean. Yet the men who ascended the Niger were discouraged by the apparent poverty of the country, (though they saw but little of it,) as if they had never

been informed that the productions of Africa are not brought to the rivers to be conveyed to the sea in steamboats. If they had gone into the heart of the country and established factories, and had sent boats up the rivers every winter, it is quite reasonable to believe that the course of the caravan trade would, by this time, have been almost entirely changed, and that the streams of Central Africa would have been the highway of a valuable traffic. But the English came to a hasty and mistaken conclusion, and abandoned their pursuit. In consequence, this wide field for commercial enterprise yet lies open. The French have thought of reaching it by means of caravans across the desert from Algiers. M. de Montverren correctly supposes that such a trade "would enrich the inhabitants of the kingdom of Algiers," and "would have a great effect upon the civilization of Africa." The English also have not forgotten their defeat, nor their old desire to find a direct highway to the wealth of the interior. It may be regarded as certain that they will discover the means of correcting their former mistakes, unless this discovery is first made by others. The establishment of a direct and permanent trade with Central Africa will speedily follow.

The commerce of the United States with Africa has never been extensive. We even permit the English to make large profits on the productions of our own country—principally tobacco and certain cotton fabrics—which the African trade demands. How long shall it be told that the Americans neglect to become competitors in a valuable trade which lies so near our doors, and requires the peculiar productions of our country? It is now in the power of American merchants to make a large part of this trade their own. Let factories be established in the great commercial cities of the interior, and on the rivers; let the productions of the country be purchased and sent to the ocean in steamers every winter; and it will not be long before the caravan trade to the Mediterranean and other places would be greatly diminished, and the Niger and Shary will drain the whole interior of the continent of its wealth. The navigators of these streams will reap the golden harvest.

One effect of a direct trade with Central Africa would be an increase of its valuable productions. At present, we may suppose that many of these are unknown to commerce, and others are very imperfectly developed. Even the gold mines are but sparingly wrought, *once a year*, at a certain season. Most of the vegetable productions, which might be valuable in commerce, are still more neglected. Of the natural capabilities of this extensive country, which adds so little to the wealth of the world, travelers speak in the most enthusiastic terms. "It cannot admit of a doubt," says Park, "that all the rich and valuable productions, both of the East and of the West Indies, might easily be naturalized, and brought to the utmost perfection in the tropical parts of this immense continent. Nothing is wanted to this end but example, to enlighten the minds of the natives, and instruction, to enable them to direct their industry to proper objects. It is not possible for me to behold the wonderful fertility of the soil; the vast herds of cattle, proper both for labor and for food; and a variety of other circumstances favorable to *colonisation** and agriculture; and to reflect withal on the means which present themselves of a *vast inland navigation*, without lamenting that a country, so abundantly gifted and favored by nature, should remain in its present neglected and savage state." No one can doubt the correctness of Mr. Parks'

* A colony of intelligent Christian blacks on the table lands of Central Africa might become a means of incalculable advantages.

views. Let commerce, civilization, and Christianity shower their blessings upon this great country, and it will expand before the world as bright as the fabled Hesperian gardens.

The character of the people is such as to invite the approach of merchants and philanthropists. They are naturally fond of traffic. "Men, women, and children, trade in every direction." Many of them are eminent among heathens for certain noble virtues, as kindness, hospitality, and honesty. This assertion might be proven by quotations from many writers. A very favorable trait in their character is their frank and childlike simplicity. They acknowledge their ignorance and desire to learn. Many an African heart has glowed with joy when the traveler has told that white people would come and trade with them and instruct them. On this subject we might relate some affecting anecdotes. The desire to be taught in arts, science, and religion, appears to be regularly, and in some places rapidly increasing. In fact, the progress of these African tribes has been upward for some centuries. Without the aid of intercourse with Europeans, they have struggled through the deepest barbarism, and have attained some degree of civilization. It can scarcely be doubted that a crisis has now arrived in their history. A spirit of inquiry and of improvement has been aroused among them; they are absolutely calling on the whites for knowledge; and at last the world seems almost ready to enter earnestly into an effort to ameliorate their condition. There is hope that the day is not distant when the rude kingdoms of Africa will begin to take their station among the improved nations of the earth.

Africa, however, is not like other countries, which we may enter at pleasure. It is a country "whose land the rivers have spoiled." No country has so many extensive unhealthy districts as Africa, especially on the coast and near the great rivers. It is this circumstance, more than any other, which has repressed the ardor of the English. But it is safe to assert, that their expeditions have not been conducted with necessary prudence. Parks' unfortunate expedition set out, contrary to the dictates of his judgment, about the commencement of the rainy season, and the habits of his "dashing fellows" were not such as might promise security against the ravages of the fever. They *all died*, about forty in number, during a march of five or six hundred miles. We pass over other attempts, all of which were disastrous, and notice the expeditions which were dispatched up the Niger. Here, again, we meet with evidence that the English have not yet understood the means of success in Africa. A gentleman who accompanied the first Niger expedition, complains thus: "Having now advanced upwards of three hundred miles into the interior in search of a comparatively healthier station than those along the coast, and being obliged to sum up my investigation in this single sentence, 'I have found none,' I feel no small portion of grief and sorrow." But it is really astonishing that this gentleman ever indulged such hopes as it seems he did; or that he was in the least disappointed, when he saw that the banks of the lower Niger were unfavorable to health. Every one should know that the alluvial swamps and putrid lagoons of tropical rivers invariably produce sickness. But this fact the English appear to have forgotten, when they were looking for healthy situations about the delta of the Niger. Hence, at the end of these awkward expeditions, they fell readily into the conclusion that "white men cannot live in Central Africa." But the climate of the highlands has not been tested. What place is more sickly than Chagres, or more healthy than the table lands of South America? It is not unreasonable to hope that health may be enjoyed even in Africa. The elevated and

temperate districts in the interior, strown with granite, and watered by mountain streams, may yet afford the white man a comfortable home. To these regions, the most civilized and interesting in Africa, enterprising young men might be sent to make the experiment. If they should succeed in establishing a regular trade, they would enrich their principals, themselves, and Africa.

The most favorable time for navigating the lower Niger is from January to April. The rainy season is sickly, and the commencement of the dry must be so, of course, owing to the great quantity of low lands left exposed to the sun. But even if the climate should prove very unfavorable to whites at all times and in all places, still a direct trade with the interior would not be impracticable. Boats might be manned and officered by acclimated blacks from Liberia; the trading establishments in the interior might be committed to the same class; and in a word, companies might be formed, partly of Americans and partly of Liberians, leaving the transactions in Africa to the latter. But when we remember how many white men have lived in Africa, even on the coast, we cannot yet suppose that they will be unable to live in the interior. We may venture to hope that the day is near, when benevolent and honorable Americans may be found in every part of the country, some preaching, others teaching arts and sciences, and others engaged in legitimate traffic, but all conducing to the improvement and happiness of the natives.

ART. IV.—INSURANCE: ITS HISTORY, LEGAL PHILOSOPHY, AND MORALS.

INSURANCE may, with propriety, be termed one of the chief benevolences of commerce. In early times, when the enterprise of merchants forced them into foreign countries, when the prejudices of other classes, and the dangers and losses incident to these expeditions, made it necessary that there should be established between them a law of mutual confidence and support, the foundation of a system of good faith was laid, which forms the groundwork of all mercantile transactions, and has given to merchants themselves a well deserved prosperity and reputation. In none of their affairs is the necessity of this good faith, or of its identity with their success, more observable than in the contract of insurance. Those who take a superficial view of commercial concerns, and who, from the imperfect outline of the incidents of traffic, judge of its usefulness to, or of its intimate connection with, the prosperity and security of society, have been disposed to regard the contract of insurance with jealousy. Combinations of individuals with the intention to the concentration of capital to promote and secure this engagement, or to regulate it upon more just and simple principles, have never been justly appreciated by the great mass of persons who are collaterally benefited by it; and the doctrine of insurance proper, identified as it is with the very best interests of civilized life, giving to trade a wholesome stimulus, and to property a just stability, has often incurred the odium which, in justice, should be applied to those wager policies which, like parasitic plants, have grown upon, and deeply affected the parent trunk.

That noble system of insurances which now exists in all commercial countries, and which, more especially, has been molded to perfectness and usefulness in England, France, Germany, and America, has gradually expanded

as the commercial horizon has opened. As mercantile character has become more developed, as the diffusion of knowledge has become more general, as facilities of intercourse between nations have been encouraged, and liberality in trade been the more displayed, the more have the just proportions of this engagement been exhibited, and its beneficial influences extended.

The advantage of some regulation with respect to indemnity against the perils incident to commerce, was seen by the Grecian and Roman merchants at an early period in the history of those nations. A plan of insurance, bearing close analogy to the contracts of bottomry and of respondentia, was in use among them, and tended greatly to the encouragement and security of the limited, but important nautical expeditions of the time. It was the practice of capitalists of those nations to advance money upon the vessel, or goods, destined to certain voyages, on the condition of its repayment on their arrival at the particular port; or of its loss, in the event of their destruction. Against this risk was stipulated the payment of an interest or accumulation, exceeding the amount usually required in the case of ordinary loans of money. The risks, against which the indemnity was made, were specified in a written engagement; and the lender invariably sent with the ship an agent, who received the money loaned, as well as the accumulation, at the specified port. It may not be hazarding a strained speculation to suppose, that out of this practice grew the custom of attaching supercargoes to vessels, on undertaking voyages to ports, between the merchants of which and the exporter no credit or confidence existed. Nor is it reasoning too curiously to assert, that the facility thus afforded to the trade of these people gave a very strong impulse to civilization. But for these encouragements it would have been impossible for the tradesmen of those days to have pushed their adventurous barks into strange seas, and to place upon barbarian shores the fruits of Grecian and Roman industry and art. But for the aid thus furnished, the energies of their enterprising merchants, the institutions and manners, the language and laws of those communities, subsequently exercising such powerful influences over the destinies of all Europe, would never have been grafted upon other societies, or been transmitted to other generations. This does not present the only instance when, to the hazards undertaken by the merchant and seaman, are to be traced that extensive circulation of manners and opinions, of products and of inventions, which furnishes to each nation the refinements and useful arts of all, and, while wonderfully reducing the labors, augments the comforts and luxuries of private life.

The propriety and benefits of a system of insurance grew out of the liability of every merchant to certain losses, occasioned by fire, the seas, or the acts of enemies. If it were not that some indemnity against these perils existed, the avocation of a merchant would be too hazardous to justify the risk of much capital, and other classes of persons would suffer from the absence of that demand and activity which that branch of industry invariably produces. It has been clearly shown, by a very experienced writer, that the prosperity of a society depends greatly on the immediate union of the employments of the plow, the loom, and the anvil. He might have added, upon the connection with these of the merchant; for without his agency, to pass from hand to hand the productions of each; without his credit, to anticipate the fruits of their industry; without the confidence which, over a wide extent of country, sustains his negotiations; without the arrangements which he plans for their security against various perils, these wonderful agencies of peaceful life would be at once without motive power and reward.

The indemnity against losses, which, to sustain the existence of trade, and to enable society to develop its resources, must be supplied, is to be furnished either by the whole body of persons, or by one. The uncertainty and complexity of any method which would require contribution from all, have forced upon men the adoption of the plan now existing, whereby one man undertakes all the risk, and receives all the premiums, nicely regulating his business by a calculation of the proportion of fortunate adventures to the losses which may occur, and a prudent speculation upon the various chances of success and misfortune.

It has been said that the law of insurance was established by Lord Mansfield. It is true, that to the lucid expositions of this eminent jurist is due much of the certainty and clear distinctions which prevail in connection with the subject; but it is not true that the doctrines which he expounds originated with him. The leading case of *Carter vs. Boehm*, reported in 3 Burrow, 1905, is an illustrious interpretation of the fundamental law of insurance, and is sufficiently curious in circumstances to justify a brief relation. On the 9th May, 1760, a policy of insurance was underwritten by Boehm for the benefit of Carter, the governor of Fort Bencoolen, or Marlborough, in the Island of Sumatra, against the loss of said fort, by a public enemy, within the year beginning on the 16th October, 1759. On the 1st April, 1760, a French man-of-war and a frigate, under the command of Count D'Estaigne, were introduced into the river by the Dutch pilots, and the fort was captured. The defense was concealment; and it was insisted that the weakness of the fort and the probability of its capture were matters peculiarly within the knowledge of the party insured, and should have been disclosed. The celebrated Mr. Dunning argued against this position that the insured was only bound to discover facts, not the ideas or speculations on those facts.

The weakness of the fort, and its liability to attack, had been imparted by the governor to his brother, under whose instructions the insurance was effected; and it was said for defendant, that had this information been imparted to the insurer, he would have refused the risk; that whatever would tend to increase the risk ought to be made known. It was also said that a person situated as was the governor ought not to be permitted to insure at all, as he stood in the position of one whose exertions for the safety of the thing insured might be diminished by the security furnished by the policy. Lord Mansfield was at first inclined to the opinion that this last position was correct; but on a consideration of the facts, that the fort was in reality only a trading establishment, and the insured, though called governor, only a merchant, and the analogy of his position and that of the captain of a vessel or of a privateer, part owner, he held the objection to be without validity. On the other points he ruled, that as the insurer could judge of the probability of the contingency as well at London as the governor could at Sumatra, and the governor not being aware of, and therefore not concealing any particular design for the capture of the fort, and as the insured knew that the policy was taken for the benefit of the governor, whom he also knew could not, consistent with his duty, disclose the condition of the establishment, therefore, there was no such concealment as vitiated the contract.

It will be perceived that the great tenet which distinguishes this case is good faith; and if Lord Mansfield did not borrow from the civil law the model of his reasoning, he certainly took from it, and applied to the contract of insurance, the precepts of that system of jurisprudence which regulated contracts generally—precepts which themselves are founded on great prin-

ciples of morality and common sense. These lay in nature, and no code has ever more clearly expounded and simplified them than that of Rome. They were as clearly understood then as now. The faithful practice of them depends, in each age, upon the integrity of the merchant.

Previous to the decision of the above-named case, the law of insurance was involved in much obscurity, and its practice regulated very imperfectly by any general principle of honesty. Too great credit, therefore, cannot be awarded to Lord Mansfield for the clearness with which he deduced, and the firmness with which he applied the leading principles of it, so as, in effect, to graft upon every contract of this nature the exalted morality of the law. His strong mind assisted in establishing upon an infinite variety of cases, differing in circumstances and complex in arrangements, doctrines, which regulated all by general rules in beautiful harmony, and perpetuated a line of distinction which separated the wager policies of the age from the insurances which operate with such activity on commercial affairs.

Wager policies were a fungus which grew on the body of genuine insurances. They were not only imperfect in the security afforded, but differed from true insurance in being often made by parties possessing no interest whatever in the thing insured. They usually consisted of a wager that a particular ship would not arrive at a named port, and a premium was advanced by one on the agreement that if she did not arrive a certain sum should be paid by the other. These contracts thus only covered the case of a defeat of the voyage, and, independent of other defects, did not provide a perfect indemnity. The distinction between the two were very perfectly defined by Lord Mansfield, and the system, which he contributed so much to maintain, was materially strengthened by the labors of Magous, who published a most valuable work on insurance. Magous was a Hamburg merchant, who settled in London; and his treatise, for the first time, collected the various regulations of commercial nations upon the subject of partial and total losses, and the rules of adjustment incident to each particular case. The important principles thus gathered from the civil, and grafted upon the common law, have been made statutory in England by the 14 and 19 George, caps. 48 and 37; and by various decisions of the American courts, have gradually become the law of the United States. A very strange piece of political history illustrates the rise of monopoly in connection with insurance companies. In the reign of George I. frequent attempts were unsuccessfully made for the establishment of certain companies with exclusive privileges of insurance. The civil list being ascertained to be in arrear, the ministry were at last offered a bonus of £600,000 for the king's charter and the sanction of Parliament. This offer was accepted, and the Royal Exchange Assurance Office and the London Assurance Office were created. These charters prohibited insurance by other companies or partnerships, and thus changed the common law and the usage of merchants, which had left the field of insurance open to all persons. The monopoly given by these charters was repealed by statute 5 George IV., ch. 114.

The maxims which give life to this contract are, 1st, that it is always a contract of indemnity; 2d, that there must be a subject matter of insurance; 3d, that something must be at risk; 4th, that the thing so at risk be described in the contract; 5th, that the party insured have an interest in the subject; 6th, that the perils or risks be specified; and, 7th, that the party insuring fairly and honestly disclose all the circumstances within his own

knowledge which may be necessary to enable the insurer to estimate the risk he is incurring.

I. An interesting case, in which Lord Ellenborough delivered the judgment, (*Godsall vs. Boldero*, 9 East, 72,) settles the question that insurance is a contract of indemnity. The plaintiff was a coach-maker, the defendant a director of the Pelican Life Insurance Company, and the subject was the life of the celebrated William Pitt, the great English minister. Mr. Pitt being a debtor of plaintiff, he took out a policy upon his life, at a premium of fifteen pounds fifteen shillings per year, for seven years. The policy was signed in November, 1803, and Mr. Pitt died in February, 1806. To the action brought upon the policy, with other defenses, it was plead that the interest of plaintiff was a certain debt of £500 due from Mr. Pitt to plaintiff, which debt, after Mr. Pitt's death, had been paid by his executors. It was shown that Mr. Pitt had died insolvent, and that the debt had been paid out of funds granted by Parliament. It was contended that plaintiff was entitled to recover upon the policy, notwithstanding the payment of the debt, because the insurance was not on the debt but on the life of the debtor; that the payment was not material because gratuitous, and as Mr. Pitt had died insolvent, there was a total loss; that the underwriter's liability could not be redeemed by the voluntary payment, by a third party, any more than, in the case of insurance against fire, the insurers could avail themselves, *pro tanto*, of charitable donations; that, in the case of life insurance, the premium is not calculated upon the risk of insolvency, but upon the probability of the duration of life. But it was held that this assurance, like every other to which the law gives effect, was a contract of indemnity as distinguished from one by way of wagering or gaming; that to enforce the policy, notwithstanding the payment of the debt, would give to a creditor the opportunity of gambling upon the life of a debtor, though without reason to doubt his solvency, and, upon his death, to reap a double satisfaction; that the plaintiff's interest was that of a creditor, depending upon the life of Mr. Pitt in respect of means, and the probability of payment from the continuance of life, and of loss from death; that the event against which indemnity was sought was the expected consequence of death, as affecting the interest of plaintiff in the loss of his debt; that if the debt, which was the foundation of the indemnity, is paid, it matters not from what source the fund is derived; that the plaintiff's demand being for indemnity, his action must be founded upon the nature of damnification; and whatever undoes the damnification, in whole or in part, operates upon the indemnity in equal degree. (Per Lord Mansfield, in *Hamilton vs. Mendes*, 2 Burrow, 1210.)

The digression may not be without use, which enables us to indulge the reflections naturally forcing themselves upon the mind, in contemplating this case. Mr. Pitt had died insolvent, and Parliament with commendable liberality had decreed him a public funeral, and appropriated £40,000 for the payment of his debts. If, on the one hand, we see an instance of one of the most brilliant intellects of the age, one long devoted to the public service, and conferring extraordinary benefits upon the country, sinking under the embarrassments common to all men; on the other we see an obscure individual, a common mechanic, protected in the privilege of securing the life of the greatest statesman of the age, for the safety of his debt. The equality and justice of that law cannot be too highly commended, which throws its protecting influence alike around the favorite of the nation, and the coach-

maker of Longacre—which stands, a great arbitrator, reconciling the conflicting interests of all classes of society, equalizing their incongruities, and guarding, with like simplicity and effect, the most sacred right of the constitution, and the least considerable right of the citizen. One of the most satisfactory points of view from which to regard this case, is that which presents it as an example of the consideration in which the English government invariably holds her citizens, and of the gratitude displayed towards her public servants. Mr. Pitt's political career was surrounded with circumstances peculiarly calculated to promote jealousies and excite party spirit. Commencing with the destruction of the Rockingham administration; working through the coalition of Fox and North; encountering all the odium of the great war of reform then just begun; undertaking the labors of those political immunities afterwards granted the Irish Catholics, and effecting the union of that country with England; still, at his death, party jealousy was hushed by the national lamentations, and a sentiment of generous regret pervaded every mind in the kingdom. Whatever may be said of the British government in other respects, it cannot be denied that it unites, in an eminent degree, strength with public spirit. We meditate, with fraternal pride, the support which she has, on numerous occasions, given her people;—instances in which millions of treasure have been expended, and national wars been freely encountered, in vindication of the liberty of the meanest citizen, and in resisting violations of the least important rights of property. The highest point of usefulness and honor for a nation is that when her government knows no right too feeble for protection—no public service beyond the reach of just reward.

Following this case, the English courts have decided that, if part of the debt be paid, the insurers are, *pro tanto*, protected. In *Irving vs. Richardson*, (1 M. & Rob. 153,) the defendant effected insurance with two companies on a ship, the value of which he gave at £3,000. In one office he was insured for £1,700, in the other for £2,000. On a loss he received both sums. One of the companies being ignorant, when it paid the loss, of the insurance in the other office, brought this action to recover the excess £700. It was proved that the vessel was in fact of the value of £3,700; but the plaintiffs were held entitled to recover, because the insured was bound by the valuation in the policy.

II. The subject matter of insurance may be ships, goods, merchandise, the freight or hire of ships, houses, warehouses, goods laid up in them, bottomry and respondentia, and lives. An exception as to the general authority to insure, exists in the case of a sailor's wages, which would seem on a casual view to be singularly at variance with the protection usually afforded this class of persons. But this prohibition only illustrates the beautiful symmetry of the law, and its care in the forming of a rule to guard against the remote consequences which may affect it. The principle which forbids a sailor to insure his wages, rests on the tendency of such indemnity to diminish the exertions necessary for the safety of the thing insured. (*Webster vs. D. Threlk.* 7 Term R. 157. *Wilson vs. R. E. A. Co.* 2 Camp. 626.) Mariners are not, however, prevented from insuring in cases which would not be affected by this principle; as in case of wages to be received abroad, or of goods purchased with them to be brought home. A captain of a ship may in general insure his wages, commissions, and privileges. (*King vs. Glover*, 1 Bos. & Pul. 206.)

III. IV. V. That something should be at risk, is necessary to give con-

sideration to the contract; and that the nature of the risk, as well as of the thing at peril, should be stated in the written evidence of the engagement, are essential, in order that the legality of the risks, and the value and identity of the subject, may be apparent. The propriety of these requirements are sufficiently obvious to render reasoning or illustration unnecessary, and we proceed to consider the more important heads of interest and good faith.

VI. VII. Previous to the enactments of the two statutes of George III., above-mentioned, a description of insurance was tolerated of the nature of *wager* policies, interest or no interest. These were only recognized where the policy made it part of the contract. Though denounced as inconsistent with the views which condemned all contracts of the nature of wages, yet it is clear that this particular description was permitted to be recovered upon, on the ground that the want of interest was openly and fairly stated as part of the engagement; and no fraud could arise from concealment as to interest, when the insurer was informed that there might be no interest in the party insured, and speculated on this contingency. These *wager* policies were wholly abolished by the statutes above-named. The first case which arose under the statute of 14 George, was of singular character. It was that of *Roebuck vs. Hamerton*, reported in Cowper, 737. The defendant, Hamerton, in consideration of a certain sum, undertook to pay plaintiff a greater amount, in case a person known as the Chevalier D'Eon should at any time prove a female. This policy was held to be within the act. *Sutherland vs. Pratt*, reported in the 11th volume of the highly reputable reports of Meeson and Welsby, discloses fully the kind of interest which a party must possess to enable him to insure. The plaintiff had accepted a pledge of goods at sea, as collateral security for a debt. Upon these he effected insurance, lost or not lost. A partial loss had occurred before the assignment, but of this the insured was ignorant until after the policy was underwritten. The Court held that this was not a *wager*, but a contract of indemnity, with respect to past as well as future losses. It was conceded, that had the loss been total before the acceptance of the pledge, no recovery could have been had. The same doctrine has been held in the American courts. (*Paddock vs. Franklin Ins. Co.*, 11 Pickering, 227. *Cleveland vs. Class*, 5 Mass. R. 201.) The interest which the statutes of George embrace, has been held by Lord Tenterden to be of a pecuniary nature. See his opinion in *Halford vs. Kymmer*, 10 Barn. & C. 725.

In some of the United States *wager* policies have been declared illegal on general principles of law. In others, policies, interest or no interest, have been recovered upon; and in some, in which *wager* policies have been sustained generally, they have been repudiated if conflicting with statutory regulations or public policy. (*Edgill vs. M'Laughlin*, 6 Wharton, 179. *Armory vs. Gilman*, 2 Mass. R. 13. *Perkins vs. Eaton*, 3 New Hamp. R. 155. *Jahel vs. Church*, 2 Johns. Cas. 333. *Buchanan vs. Ocean In. Co.* 6 Cowen, 318.)

A trustee, in respect to the interest of which he is trustee, has been held to possess an insurable interest. (*Tidswell vs. Angerstein, Peake*, 151.) And also, a wife in the life of her husband. (*Reed vs. Royal Ex. As. Co. Peake's Cas.* 70.) So a consignee with a power of sale. (*De Forest vs. Fulton Fire Ins. Co.* 1 Hall, 84.) Different parties having different interests in the same subject, may also severally insure, as well as one having an equitable interest in property, the legal title to which is in another. (*Higgins vs. Dall*, 18 Mass. R. 96. *Locke vs. N. Am. In. Co.* 13 Mass. R. 61. *Oliver vs. Greene*,

8 Mass. R. 133. *Bartlet vs. Walton*, 13 Mass. R. 267. *Jackson vs. Man*. In. Co. 23 Pick. 418.)

With regard to the good faith necessary to be observed in disclosing the peculiar circumstances of the case, it may be generally remarked that the special facts upon which the contingent chance is to be computed, lay in the knowledge of the insured alone; and the insurer trusts to his representation, and acts upon the confidence that these representations are truly made, and that no circumstance which can mislead him, or influence his estimate of the risk to be incurred, is withheld. (Per Lord Mansfield, in *Carter vs. Boehm*.) The withholding such a circumstance is a fraud, and vitiates the policy; and so would the suppression of the fact by mistake, and without a fraudulent intention, because the insurer is deceived, and a risk run different from that intended and understood. This principle applies also to the insurer, in case he suffers the insured to act upon facts within his knowledge which he conceals, as when he insures against the loss of the vessel which he knows is in port. But it does not follow that the insured is bound to disclose all he knows. He need not mention facts which the insurer knows, or which he ought to know, or which he waives. The insurer is bound to know the causes which may occasion natural perils, as the difficulty of a voyage, the kind of seasons, the probability of variations of atmosphere, political perils growing out of wars and the disagreements of States, the probability of peace from the character of enemies, the weakness of their councils, want of means, &c. The insured is not bound to disclose the age of a vessel, nor when built; nor generally, any circumstance of general facts, of necessity to be implied from the nature of the policy; or any of the usual or accustomed incidents of the voyage, or trade, involved. (*Fitzherbert vs. Mather*, 1 Term R. 12. *Elkin vs. Larkins*, 8 Bing. 198. *Friere vs. Woodhouse*, Holt. 572. *Noble vs. Kennoway*, Douglass, 510. *Vallance vs. Dewar*, 1 Camp. 503. *Stewart vs. Bell*, 5 Barn. & Ald. 238. *Carter vs. Boehm*, 3 Burrow, 1905. *Poppleston vs. Kitchen*, 3 Wash. C. C. R. 139. *Elting vs. Scott*, 2 Johnson's R. 157. *Buck vs. Chesapeake In. Co.*, 1 Peters, 161.)

From these citations it may be deduced that the principle of concealment, sufficient to render a policy of insurance void, rests on this: That the party, with the view to his own advantage, has suppressed some fact, which could not be present in every contract of insurance, and which the insurer is not bound to know; and which, if disclosed, would the better enable him to estimate the risk he is about to encounter.

Whatever it is the duty of the insured to disclose, it is a part of the obligation to represent with the minuteness and care which a prudent man would display in his own business. Indirectness would be equally vicious as positive acts of concealment; for if one were carelessly to avoid the means of information which would enable him to furnish the necessary facts to the insurer, it would amount to concealment. Should the insured, however, after diligent inquiry, honestly communicate all the knowledge he has obtained, he will have performed his duty, and the fraud or negligence of his informant would not affect him. (*Biays vs. Union In. Co.*, 1 Wash. 506. *Livingston vs. Delafield*, 3 Caines, 53.)

These authorities and conclusions sufficiently show the nature of the principles which exist as a substratum under the contract of insurance. Regulated by these, every engagement of this nature deserves the encouragement of all classes of society. In the great system of civilization, this contract operates as a powerful engine of trade; stimulating every branch of industry,

guarding against the perils which, of necessity, must encompass the labors of men. Like that motive power which, in an obscure corner of an immense factory building, amidst complicated machinery, the uses of which are hundreds unknown, unseen gives motion and life, and everything but the quality of speech, to reels, and spindles, and looms, while the cotton wool, unrolled from its original bale, comes forth a beautiful fabric; this system, in the hands of honest merchants, without parade, from the union of the capital and several, calls into existence a power which accompanies the products of the loom, or the results of the industry of the tradesman, into dangerous seas and barbarian regions; indemnifies them against the various perils of the elements, and takes life itself under protection. Judiciously regulated by prudence and honesty, its tendency is to promote largely the prosperity of every society; and we cannot hold in sufficient contempt the politicians of those States, who from ignorance or selfishness, condemn the attempt to obtain from this system the countenance of legislation; who discover in every combination of capital the history of fraud; who, instead of advancing their country by unfettering her trade, and encouraging the enterprise of her merchants, let her may burst forth in more brilliant and useful triumphs, place additional weights upon her industry, and torture away her vitality in exploded speculations.

P.

ART. V.—THE MANUFACTURE OF IRON IN GEORGIA.*

THE iron mines of this State are found in the primary and metamorphic rocks of the spurs of the Allegheny Mountains. Through the northern portion of the State these pursue their course towards the south-west with similar features of parallelism and straightness peculiar to them further north. At their more broken character, the greater ruggedness of their outline, the impetuous nature of their streams, dashing over high ledges of rock, and the clearness of their waters, testify to different geological formations than the stratified shales and sandstones of which they are composed in Pennsylvania. It is in these outliers of the main ridge of the Alleghenies that the metamorphic slates and quartz rock are found, which are productive in gold ores; and frequently in near proximity to these are deposits of hematite iron ores of extraordinary extent. In the gneiss, also, are found veins of magnetic iron ore of great purity, as at Cane Creek, near Dahlonega; but to these little attention has been directed. Specular ores, too, like those of the

* We have examined a manuscript on the "Manufacture of Iron in the United States," by J. T. Hodge, Esq., an accomplished geologist and mineralogist in the city of New York, which describes fully most of the important mines of iron, and the treatment of their ores in blast-furnaces. Statistical tables are included of the number of furnaces in most of the States, and of the cost of production and quality of iron made at each. Maps of the different ore-districts and plates of furnaces representing the peculiarities of form in each district, accompany and illustrate the descriptions. Previous to the publication of the work, which we hope will not be long delayed, the author has consented to our making use of parts of it in this Journal; and we present to our readers in this number extracts, somewhat condensed from the original, on the *Iron Ores of Georgia*.

beside the papers on the manufacture of iron, Mr. Hodge has also prepared, mostly from his own observation, detailed accounts of the *Copper and Lead Mines of the United States*; making the most complete, if not the only treatise on these subjects. From their scope and general interest, and the highly practical character of the work, it appears to us that the book might well be admitted among public documents published by order of Congress;—indeed, it would, in our opinion, form a valuable contribution to the publications of the Smithsonian Institute.—*Ed. Merchants' Magazine*.

Iron Mountain in Missouri, are found in considerable quantity in the vicinity of some of the hematite beds.

The three furnaces in this State are situated in this region, and are supplied with hematite ores only. The first is in Habersham county, three miles below Clarksville. The ores are said to be abundant, and the expenses of manufacture very low. Localities of the same ore are of frequent occurrence from this point down the course of the Chattahoochee River, but none of them are turned to any account.

Another range of them, of much greater consequence, is found in the Allatoona Hills, along the Etowah River, in Cass and Cherokee counties; and as a railroad already passes through this iron district, it gives to it an importance that will lead me to describe, with some minuteness of detail, its resources.

The Western and Atlantic Railroad, connecting at Atlanta with the Georgia Railroad, crosses the Etowah where this river makes its passage through the Allatoona range, at a distance of about two hundred miles from Augusta. Here the broad, shallow stream, obstructed in its course, falls over ledges of rock, producing good water power, which has been improved by dams between the mountains from three hundred to four hundred feet long. On each side are seen, projecting from the hills, ledges of rough siliceous rock, in strata of various degrees of thickness, dipping to the south of east. Beds of limestone are associated with these rocks, and veins of sulphate of barytes of great extent. On the south-eastern slopes of this range of hills talcose and mica slates, hornblende slate, greenstone, and quartz veins containing gold more abound. Through these rocks deep cuts have been made for the railroad, one of them ninety feet from the surface down. To the west and north of these hills an extensive limestone tract commences, about four miles from the river. Nearly the whole of Cass county is formed of this rock, and it spreads out into Floyd and Murray counties. From its position adjacent to the metamorphic rocks of the Allatoona Hills, and bordering on the other side the newer secondary strata, which, over the line in Tennessee, reach up to the coal formation, this is probably no other than the Trenton, or Bird's-eye limestone of the New York groups. From what information I could obtain, it would seem that the eastern boundary line of this formation passes nearly north, through the western parts of Cherokee and Gilmer counties, into Tennessee.

The iron ores are found on both sides the Etowah River. To the south-west they extend into Paulding county, and in the other direction through Cherokee county; the furthest place at which I have observed them being between Sharp Mountain Creek and Long Swamp Creek, in the north-eastern corner of this county. So far as explored, their range is found to be full forty miles, and their course about north-east and south-west.

The principal locality on the south-east side the river is that on *Pumpkin-vine* or *Town Creek*, in the south-eastern corner of Cass county. This stream heads in the Allatoona Hills, and flows across their course toward the north-west into the Etowah. Its mouth is in the midst of extensive and rich plantations of bottom lands; three miles above it is hemmed in by hills from two hundred to four hundred feet high. But, for a considerable distance within the margin of these hills, the stream is still skirted with bottom lands three-quarters of a mile wide. These were covered, when I saw them in 1842, with a heavy growth of poplar, beech, oak, walnut, chestnut, ash, hickory, &c., all of the first growth, and much of it very large timber.

The hills are of talcose and hornblende slates, quartz rock, limestone and iron ore. The two latter, as is common in all the hematite districts at the north, occur in close proximity to each other. Some deposits of this variety of ore are seen of great extent near the banks of a canal dug through the bottom to afford water power. This canal winds around a knoll on lot numbered 1040, in which a trench has been sunk into a solid ledge of ore. This was found to extend just beneath the soil the whole length of the trench, about thirty yards, and no indications were afforded of the limits of the bed. The ore, of which I have still a large sample, much resembles the best of the West Stockbridge and Salisbury ores of the Housatonic valley. It has the same loose shelly structure, covered with reddish yellow rust on one side, the compact chocolate and black pure ore within; and on the other side it is covered with projecting stalactites of the oxide of iron. In quantity, quality, and convenience of ore, this locality seems to leave nothing to be desired; and it is, beside, within two miles of the railroad.

In its vicinity, somewhat nearer the railroad, on lot 970, is a high hill of quartz rock, on which is found a close grained peroxide of iron, which appears to be a rich specular ore. It will probably prove an important ore to work with the hematites. The quantity is evidently great, but no attempts have been made to ascertain it. This is the ore before referred to as resembling the Iron Mountain ore of Missouri.

The water power of this stream can hardly be depended upon for blast-furnaces. The situation is healthy, except when the bottoms are overflowed, or low lands are cleared and the timber left to rot upon them. Among the hills, or by the swifter running streams, no region in the United States is more salubrious, or enjoys a more delightful climate. Its elevation above the sea saves it from the excessive summer heats of the lower parts of the State; and its southern latitude gives it temperate and pleasant winters. These advantages, together with the fertility of a large portion of the country, have led to it a considerable population, who have built up many thriving towns, and established manufactories of various sorts.

The range of iron ores crosses the river about two miles above the railroad bridge. Here the mountains come down to the water's edge, and the only paths back from the river are up the narrow valleys of the runs. The hematite beds crop out on these hills near the ledges of quartz rock. To estimate their extent would be like calculating that of the ledges of quartz rock itself. The surface is often covered with fragments of ore, but not all is alike good for use. Some of it is highly siliceous, and some judgment is required in selecting the best qualities. Localities of it are traced, with few interruptions, for ten miles in a north-east direction. About eight miles from the river is a high knob, which presents a greater show of ore than I have seen even at the famous Iron Mountain in Missouri. The hill, which is nearly as high as the "Pilot Knob," (near the Iron Mountain,) and which may well be called the *Iron Knob*, has upon its summit the outcrop of a bed of hematite fifty paces across, the rocks of ore piled upon upon each other forming so rough a path that it cannot be crossed on horseback. Below it the sides of the hill are covered almost wholly with ore. The bed is interstratified with a rock composed of quartz and feldspar in coarse brecciated fragments, which dips 75° or 80° east by south. The rock beneath it is of much finer texture than that above. Toward the river, for about a mile, the bed may be traced without losing it; and in the other direction I was told it had

been followed two miles further. Two other parallel beds also occur near it. Manganese ore is associated with the hematite occasionally.

The two blast-furnaces are situated on Lick Creek, three miles from the river. The situation is not a convenient one. They are small stacks, built by Mr. Stroup, by whom they are in part owned, the other proprietors being the Hon. Mark A. Cooper and Leroy M. Wiley, Esq. The furnace in operation in 1842 was only twenty-four feet high and six feet across the bushes. As the smelting was then conducted, two and a half tons of ore were charged a day, from which about one and a quarter tons of pig-metal were obtained; and, as I am informed, the present operations with the two furnaces do not show any great proportional increase of production. This seems a small result when compared with the workings of other furnaces, which use similar ores, as described in previous chapters. The iron, however, is of superior quality, resembling that made of the best hematites in other localities. It is suitable both for foundry and forge purposes, inclining particularly to the best No. 1 iron. The bar iron made from the forge-pig is highly esteemed for its toughness and softness.

From the abundance both of ore and charcoal, cheapness of living and labor, and great profits in this region on store-goods, the expenses of manufacture are extremely low; while the prices of iron, both that made into castings for the supply of the country around, and of the bar, are what would be considered at northern works remarkably high. The price for charcoal, delivered, was in 1842 \$3 50 per hundred bushels; and the consumption to the ton of pig-iron was estimated at one hundred and twenty-five bushels. Rating it now at four cents a bushel, and one hundred and fifty bushels to the ton, the following estimate ought to include all the expenses of manufacture:—

Charcoal 150 bushels at 4 cents.....	\$6 00
Ore, say 2½ tons, (mining 75 cents, transportation 37½ cents)....	2 53
Flux, 20 cents, labor \$2 50.....	2 70
Superintendence, repairs, and interest.....	2 50
Total.....	\$13 73

Owing to the remoteness of the locality from the great iron markets of the country, the works must depend in great measure upon their immediate vicinity for the sale of their products. This has hitherto been sufficient, for the lack of furnaces in the southern States causes all articles of castings and refined iron to be transported great distances in wagons. It was not long ago, that this very section was supplied from the furnaces in North Carolina and Tennessee. Works have been built of late on the Etowah for converting the iron into a great variety of articles required in this region, as a rolling mill, machine shops, &c. The quantity of gearing made for machinery indicates the increasing prosperity of the manufacturing interest in the surrounding counties. The cost of transportation of pig-iron to Augusta, and thence by the river to Savannah, is about \$5 per ton.

The next localities of hematite I discovered on this range were about the corner, where districts 3, 4, 13, and 14 meet, near Sharp Mountain Creek. Here, also, the quantity is enormous, and the quality of much of it is good botryoidal and stalactical hematite. It is found on Sharp Mountain within six miles of the Etowah. Mica slate is here the prevailing rock; scales of mica glitter among the black ferruginous sands in the roads. The soil is excellent, rich grass growing luxuriantly in the woods.

Beds of ore are found on both sides of Sharp Mountain Creek. One, apparently one hundred yards wide, is between this creek and Long Swamp peak, and is traced more than a mile in a north-east and south-west direction. Other parallel beds occur near by.

On the head branches of Long Swamp Creek are quarries of fine white marble, which may be opened for miles in length along the hill sides. Blocks are obtained of great size, and some of finer texture than I have seen from any other locality in the United States, except one in Vermont. The stone is in great demand throughout the Cherokee country.

The mineral resources of this region are little known. I am not aware that any particular account of them has ever been published. Their importance, however, is beginning to be appreciated; and it seems impossible that many more years should pass without a greatly increased demand for the iron ores, and the establishment of more efficient furnaces for their reduction.

Art. VI.—DECISIONS OF FRENCH TRIBUNALS OF COMMERCE,

AFFECTING THE RIGHTS OF AMERICAN CONSULS AND SHIP-MASTERS.

By FREEMAN HUNT, Esq., *Editor of the Merchants' Magazine, etc.*

DEAR SIR:—A friend, residing in France, has forwarded to me the enclosed communication, with a particular request that I would ask for its insertion in an American journal of wide circulation, as the subject to which it relates is of much interest to all that portion of our countrymen engaged in the French trade, as well as to the community in general. I know of no channel of communication more suited to this purpose than the *Merchants' Magazine*, and would feel much obliged to you if you would give it an insertion in one of your ensuing numbers.

The question to which it refers is of more importance, perhaps, than at first appears. Let us suppose the position of the parties referred to reversed; let us imagine our Board of Trade, or a committee of ship-brokers, claiming the right to legalize the acts of captains of foreign vessels in the port of New York, and the absurdity of the pretension is manifest at once. Or let us suppose that such a power, assumed at an earlier period, and acquiesced in for the sake of peace and quiet by some good-natured foreign consul, came at last to be resisted, and on being contested was shown to be one of those royal usurpations of custom grown up in spite of law, and unsustained by a tribunal on being referred to them for decision. Would we not suspect any foreign government which continued to submit to it as either very negligent of the rights of its citizens, or very inefficient in maintaining them? Commerce is already far too much burdened with the shackles imposed upon it, under form or shadow of law, to require that it should also remain under the restraints of vexatious usages which the law itself condemns.

Recommending the matter to your attention, as well as to that of your readers, I remain, very respectfully, yours,

C. E. ANDERSON.

New York, April 1st, 1849.

PARIS, January 25th, 1849.

The Court of Cassation recently made a decision of some interest in the application of the principles of international law. Property or funds of the Spanish government had been attached by French citizens, within the territory of

France, on a claim for payment for certain munitions furnished to the Spanish army. The court released the property thus attached, declaring in effect, that in their absolute sovereignty or independence, friendly or foreign nations must find complete exemption from the operation of the *lex loci*, or the statute law of the country. The same court, about a year since, pronounced a decree in some respect analagous to that just alluded to, intended to emancipate our navigation from the usurpations of certain local institutions to which it has been of late years forced to submit in French ports. The case was this. An American ship-master at Marseilles entered his protest, or sea-report, before his consul, who named surveyors on the cargo, and administered the other legal acts necessarily following the protest, all of which were duly recorded in the Chancery of the Consulate, according to the laws of the United States. The French merchants and brokers there took exception to this, claiming that he should have executed those acts before their Tribunal of Commerce, a delegation from the body of the merchants, and assailing the ship-master by a variety of legal processes, cited him before this Tribunal of Commerce, which, under the judicial powers it is permitted to exercise, gave judgment in favor of the merchants and brokers, and condemned the ship-master.

But the affair was not destined to rest here, for although a ship-master might easily be driven off by the "law's delays" the consul was not to be, nor by the impending expense involved in an apparently concerted multiplicity of suits, and appealing to a higher court—the Cour Royale of Aix—he obtained a reversal of this judgment, which reversal, on an ultimate appeal to the court of last resort—the Court of Cassation—was confirmed with all the costs upon the French parties, and in terms but little complimentary to the decision pronounced by the Marseilles Tribunal of Commerce. This measure of justice was much needed, for under the French system, apart from the infringement of our law, the French merchant was not only his own judge, but virtually his own assessor of damages for claims against our citizens. It is inconceivable why this abuse has been so long submitted to, or why our consuls have allowed it. Is it that our ship-masters and our merchants have been wanting in a proper support of their flag?

With regard to the protest, or other legal acts of the ship-master in foreign ports, the act of Congress prescribes that "copies of such acts, (received or recorded by the consulate,) duly authenticated by the consul, vice-consul, &c., under the seals of their consulates, shall receive faith in law equally as their originals would in all courts of the United States." These are the formalities required by our law; without them how are claims to be prosecuted in our courts? and who is to be responsible for their omission, the merchant, or the ship-master? Where an American consul resides, it certainly seems neither proper nor reasonable—independent of considerations of law and patriotism—that in such cases, clearly appertaining to the administrative functions of the consul, recourse should be had to the local authorities in foreign countries, especially where a different language prevails. The technical terms, and so many of the elements of proof for the justification of the ship-master in cases of loss or damage, depend upon the laws and usages of his country; such as stowage of cargo, composition of crew, finding of ship, &c. These views, in addition to the plea of reciprocity, seem to have had great weight with the Court of Cassation, and it decided that the foreign ship-master's protest, &c., regularly made before his consul, could be produced in evidence even in French courts and against French citizens. This was the language

the court, and it will be seen, therefore, that no plea whatever exists for neglect of the requirements of the laws of his country by the American ship-master in French ports. Our rights are now restored to us at Marseilles, and we would have supposed that this enlightened decision—so in harmony with our law—would have settled the question beyond cavil. Probably it would have done so in any other country and in any other place than Havre, where, it is said, too many *disinterested* officials depend upon holding our shipping and our trade subject to their control. An American ship-master at that port, when quite within the rule just quoted, and shortly after the decree of the Court of Cassation affirming that rule had been publicly promulgated, was attacked there, as in the case at Marseilles, and finally brought before the Tribunal of Commerce, which, by a wonderful coincidence, decided in its own favor, condemning the captain in costs for contumacy, and “riding rough shod” over the solemn and deliberate decrees of the supreme tribunals of their country. Facts, or technicalities, did not enter into this case; it was entirely of principle, and in that respect precisely identified with the Marseilles case. In this light it was argued before the Havre tribunal, as appears in the report of the trial, and therefore the more manifest their disrespect to their own laws, as well as their disregard of the courtesy of nations. In rendering their judgment, the Havre tribunal even ventured to make an indignant insinuation, that it might be unsafe to trust to the impartiality of foreign consuls in cases where their countrymen were concerned!—forgetting that this argument could better be applied to the other side of the question, as the consul’s duties are only administrative, or executive, and that he exercises no act of jurisdiction, and can therefore have no opportunity to display partiality were he so disposed. Havre owes much of its wealth and importance to the American trade—in fact, it is said that it possesses scarcely a mansion of the better class, or a merchant’s warehouse, that is not indebted to that trade for its foundation stone. In stronger light, therefore, is the oppressive nature of this procedure, on the part of its citizens, displayed. It did not there appear either, as was alleged at Marseilles, that underwriters had either refused to pay for losses upon proofs furnished from the chancery of that consulate.

Then, to aggravate the offensive character of the whole affair, an attack in one of their newspapers was made upon our consul there, for what, as disclosed by the Paris journals, was merely a customary discharge of an ordinary duty. In fact, I believe that there was an attempt at more serious interference. The truth was, doubtless, he had taken the cause of his countrymen out of the hands of the “Havrais,” and in appealing to a superior tribunal, had incurred the hostility of some parties interested in perpetuating the abuses he sought to remedy. From the complaints made by our consuls in France in former years to our Legation here, it would seem that a system was gradually been organized, of local monopolies, *employes*, officials, &c., linked by a curious complicity with this Tribunal of Commerce, and through whose jurisdiction it exercises, these different interests are enabled to levy a tribute upon our navigation not contemplated by treaties or sanctioned by the law.

Amongst perhaps the most obnoxious of these monopolies at Havre is that of the “Courtiers Maritimes,” (ship-brokers.) This is a close corporation, composed of four individuals, one of whom, it is said, selling his place to another, lives every three or four years upon a fortune made principally out of our shipping. Although ship-masters, when speaking the language, are under no

obligation to employ these brokers, yet have they always been defeated in every attempt to relieve themselves from this unnecessary expense, as they assert, from connivance on the part of other French officials. As a commentary upon this state of things, is the statement recently made in the National Assembly, that 35,000, since the year 1831, have been added to the number of *civil employes* of the government in France.

If our public agents abroad are not prompt in their duty, they should be instructed "to mend their ways." Where they do their duty without fear or favor, and shun no personal inconvenience in vindicating the rights of their country, they should have the full support of their fellow-citizens and of their government.

ART. VII.—A MERCHANT POET—FIELDS' POEMS.*

It does not fall within the scope of our Magazine to enter into any formal review of a production strictly literary; but the present volume of poems, coming as it does from a man of business, is a bait too tempting to resist. To a few of our readers, whose principles exact a rigid separation of the merchant and poet, the volume will doubtless be considered a high crime and misdemeanor, worthy to be visited at our hands with condign punishment, and the more excellent the poetry the more flagrant to them will be the offense. The feelings with which certain close-fisted gentlemen regard beauty in nature or art, are somewhat similar to those which animated the breast of that British merchant who, when he was informed by a lover of the picturesque that morn was breaking, turned lazily in his bed and muttered, "Let it break, it don't owe me anything." Even where insensibility does not reach this point of descendentalism, there is still established in many minds a strange antithesis between business and literature; and a person who keeps open a running account with any ideal region, and launches never so little into the sphere of intellectual commerce, brings himself at once under their surly ban of mercantile excommunication. This narrow prejudice against all studies which liberalize the head without resulting in any addition of coin to the pocket, is one of those weaknesses of cold hearts and small sharp minds which, originally springing from ignorance and insensibility, have been transmitted from dunce to dunce as a heritage of stupidity since the dawn of knowledge. No person is compelled to satirize any more than to criminate himself, a principle which those who inveigh against all graces and accomplishments above their comprehension seem to have imperfectly apprehended. So far are we from chiming in with this absurd cant of complacent ignorance, that we deem a taste for liberal studies as little likely to obstruct the interest as it is certain to promote the happiness of the merchant; and we can conceive of no libel on the mercantile community more gross than to represent it as a class of persons not only wholly absorbed in the accumulation of wealth, but as forming a kind of society to proscribe literature and taste. We believe that there not only prevails among the business men as a body a decided taste for letters, but that there are many among them who are qualified to make permanent additions to the literature of the country, and who, if they are not authors, simply illustrate a common fact that dis-

* Poems. By JAMES T. FIELDS. 1 vol. 16mo. Boston: Wm. D. Ticknor & Co.

position does not always accompany power. The volume published by Mr. Fields proves that in respect even to artistical form, that a command of the niceties and elegances of diction and harmonies of rhythm may be obtained amid all the fret and stir of daily traffic; and what is more important, that the keen, shrewd, practical sagacity and habit of looking at things in their exact form and dimensions, which make the man of business, are not incompatible with a force of fancy which plays the queerest pranks with all the accredited relations of things, a generosity of passion which rises instinctively into the heroic region of action and thought, and a delicacy of sentiment tremblingly alive to the most evanescent and ethereal refinements of emotion. Strange as it may appear to some, we doubt not that such perilous qualities as those we have last mentioned will find nowhere a more cordial appreciation than among persons whose pursuits are kindred to those of the poet himself.

Mr. Fields' volume contains two long poems, "The Post of Honor" and "Commerce," originally pronounced before the Boston Mercantile Library Association, and some thirty smaller pieces, lyrical and descriptive. In the space of a hundred duodecimo pages the author has contrived to compress a greater variety of topics and measures than some poets, more liberal of ink than ideas, manage to include in five hundred. This variety of subject, however, is capable of being classed under two general heads, answering to two marked processes of the writer's mind, the lyrical and the meditative. The lyrics are bright, rapid, direct and musical, evincing a ready abandonment of the mind to the objects which fill it, and sparkling as they flow with fancy and feeling. Such are "Fair Wind," "Saco Falls," "Sleighting Song," and "Yankee Ships," all of them having a brisk, untamed, headlong movement, a careless certainty of aim, and a "polished want of polish," which hit the very sense of satisfaction. The meditative poems are as distinctly characterized by remoteness and reserve as the lyrics are by directness, insinuating rather than presenting their meaning, and more felicitous in suggesting the brooding mood of mind whence they proceed than in expressing the separate thoughts and feelings springing from the mood. Such is the "Bridal Melody," "Eventide," "Dirge for a Young Girl," "To One beneath the Waves," each embodying a fine poetical mood, and full of suggestive beauty and lingering pathos. The poems through which the lyrical spirit rushes and sparkles, have a joyous movement even in their passion, and seem gay from the very spontaneity and swift pressure of the thronging words. The meditative pieces, on the contrary, are cunningly enveloped in an atmosphere of thoughtful sentiment, or simmer through the sunny haze of a genial humor; and the thoughts, whether serious or humorous, are half withdrawn into the mood whence they spring, and rather peep out from a hiding-place than boldly appear in front. It is difficult to convey an idea of this peculiar coquetry and reserve without an illustration, and we accordingly give a humorous one from the poem on Commerce. The picture of the school might easily have been made more vivid, but the spirit of the scene could hardly be better represented:—

"Look through the casement of yon village-school.
Where now the pedant with his oaken rule
Sits like Augustus on the imperial throne,
Between two poets yet to fame unknown:
While restless Horace pinions martyred flies,
Some younger Virgil fills the room with sighs;
Who, suffering now for one untimely laugh,
Ere long will write his master's epitaph;

Forgetting in his lines and comments bland
The painful ridges on his blistered hand.

"And that small rogue, how slyly he inweaves
The Pickwick papers with his Murray's leaves;
The race of nouns lies dim as sunken isles,
While Mr. Weller lights his face with smiles;
Or Mrs. Bardell weeps,—or lawyers plead,—
His task remains unconcerned, the wag will read."

"The Post of Honor" is a poem in heroic verse, evincing a complete mastery of this difficult measure, and bending it to the expression of the varying topics of the piece, as they range from the sad to the satirical and from the passionate to the humorous. We do not say that there is not here and there an epithet which expresses nothing, and a line which serves only to obstruct its brother; but still, in looking at the poem as a whole, we hardly know which to commend most heartily, the energy, condensation and facile movement of the verse, or the vigor and variety of the thoughts and pictures it so harmoniously expresses. Many couplets might be extracted which embody separate fancies and reflections worthy of Pope or Young, whether we consider the remoteness of the analogy or the tingling truth of the satire. The poet traces with a genial and sympathetic though critical eye the sentiment of ambition as it urges its votaries up the height of Honor, and after indicating the variety of aspirations answering to the differences of disposition among mankind, he closes with indicating true honor in a view of some of its highest and noblest disciples. The field of life which is traversed in this survey is wide, and the infirmities of the itching rage for display are caustically probed. The aspiring snobs of politics come in, of course, for their share of satire, and the following lines are an exact transcript of the meditations brooding under many a waistcoat:—

"Go mark its influence o'er each scene of life,
Your neighbor feels it, and your neighbor's wife;
He o'er Columbia's District sees it shine,
While she, more modest, thinks a coach divine.
'Be rich, and ride,' the buxom lady cries,—
'Be famous, John,' his answering heart replies;
'The golden portals of the chamber wait
To give thee entrance at the next debate;
Get votes, get station, and the goal is won,
Shine in the Senate, and eclipse the sun;
Quadrennial glory shall compensate toil,
The feast of office and the flow of spoil."

Here is a sharp cut on a species of theological Peripatetic unfortunately growing too common in these days of sacrifice for "purse' sake," instead of conscience' sake—the subject being a country clergyman leaving his beloved flock for a city pulpit:—

"He feels distressed, he goes with many a tear,
But yearns to practice in a wider sphere,—
Which, to interpret in a carnal sense,
Means a receipt of pounds instead of pence.
Go, worldly prophet! duty fling aside,
Your heart is Mammon's, and your worship Pride;
Ready to skulk when Progress might be taught,
Go hunt the Ibis of Egyptian thought,—
Leave Heaven for Tarahiah, and you can't but fail,
For every Jonah always finds his whale."

To those who have ever looked over a bankrupt's expense book and realised the mode in which some pleasure-loving gentlemen spend the money of their creditors, the following passage will be considered to contain excellent advice :—

"Consult your means, avoid the tempter's wiles,
Shun grinning hosts of unreceipted files,
Let Heaven-eyed Prudence battle with Desire,
And win the victory, though it be through fire.
Go swim at Newport to come home and sink
When the grim Notary drags you to the brink ;
Play with old ocean, wanton as you will,
Time writes no wrinkles on a six months' bill."

The following splendid lines have a nervous energy of which the pulses of the reader will afford the best criticism :—

"Unchanging Power ! thy genius still presides
O'er vanquished fields, and ocean's purpled tides ;
Sits like a spectre at the soldier's board,
Adds Spartan steps to many a broken sword ;
For thee and thine combining squadrons form
To sweep the world with Glory's awful storm ;
The intrepid warrior shouts thy deathless name,
And plucks new valor from thy torch of fame ;
For him the bell shall wake its loudest song,
For him the cannon's thunder echo long,
For him a nation weave the unfading crown,
And swell the triumph of his sweet renown.
So Nelson watched, long ere Trafalgar's days,
Thy radiant orb, prophetic Glory, blaze,—
Saw Victory wait, to weep his bleeding scars,
And plant his breast with Honor's burning stars.
So the young hero, with expiring breath,
Bequeaths fresh courage in the hour of death,
Bids his brave comrades hear the inspiring blast,
And nail their colors, dauntless to the mast ;
Then dies, like Lawrence, trembling on his lip
That cry of *Honor*, ' Don't give up the ship ! ' "

The oration which preceded the present poem was delivered by Daniel Webster, and in the passage which follows Mr. Fields grandly alludes to the great statesman and orator :—

"When faction storms, when meaner statesmen quail,
Full high advanced, our eagle meets the gale !
On some great point where Honor takes her stand,—
The Ehrenbreitstein of our native land,—
See, in the front, to strike for Freedom's cause,
The mailed Defender of her rights and laws !
On his great arm behold a nation lean,
And parcel empire with the Island Queen ;
Great in the council, peerless in debate,—
Who follows Webster takes the field too late."

We cannot refrain from making one more extract from this beautiful and brilliant poem, as an illustration of the fine sweetness of sentiment with which the author touches the pathetic in situation and character. The passages on Lamb and Gray would afford examples of this, but we reluctantly pass them over in order to quote the allusion to the Sister of Charity :—

"Wreaths for that line which Woman's tribute gave,
' Last at the cross, and earliest at the grave.'
Can I forget, a Pilgrim o'er the sea,
The countless shrines of Woman's charity !

In thy gay capital, bewildering France,
 Where Pleasure's shuttle weaves the whirling dance,
 Beneath the shelter of St. Mary's dome,
 Where pallid suffering seeks and finds a home,
 Methinks I see that sainted sister now
 Wipe Death's cold dew-drops from an infant's brow :
 Can I forget that mild, seraphic grace
 With heaven-eyed Patience meeting in her face !
 Ah, sure, if angels leave celestial spheres,
 We saw an angel dry a mortal's tears."

Among the minor poems of this volume it is difficult to make a selection, for though of various degrees of excellence, each has some genuine quality of thought or feeling which makes it worthy to form a part of the collection. One of the pleasantest pieces is "Life at Niagara," in which there are some fine strokes of fancy and wit. The following description of the company at a fashionable hotel is ludicrously true:—

"But here's *life at the Falls*—from a year to fouracore—
 (And I think by the sound there's a *day* at next door;) *Here* are members of Congress, away from their seats,
 Though sure to be there when the dinner-gong beats;
 Here are waiters, so eager your viands to snatch,
 That they leap down the stairs like a multiplied Patch;
 To the sound of sweet music they nimbly appear,
 And whisk off your corn while they tickle your ear.
 Here are pensive young preachers, dressed quite *comme il faut*,
 In coats black as night, and cravats pure as snow;
 Rich East India governors, heavy as gold,
 Hanging round like weak sun-flowers, yellow and old;
 Artistical talent, with sketch-book displayed,
 Drawing very bad water in very poor shade;
 Fat cockneys from Charing-Cross; belles from Madrid,
 Whose long jewelled fingers outrival Jamschid;
 Superb English maidens, with swan-swimming gait,
 Who float round the Rapids like Junos in state;—
 But the brightest-eyed daughters, the best string of pearls,
 Represent in their beauty our own Yankee Girls.

"Here cluster the fair, and the plain, and the prim,
 Round the gallant and gay, whiskered up to the brim;
 Here's a biped in boots, a most exquisite ass,
 Who looks at the Falls through a golden-rimmed glass;
 And to-day such a waist, N, I saw on the Rock,
 That to furnish the brains seemed a slight waste of stock.
Here's a lively old lady, all feathers and fans,
Who trots about peddling her Susans and Anns;
And a drab-colored Quaker, I've seen more than twice
Take a sly glass of something in water and ice."

But perhaps the most striking poem in the volume is that "On a Pair of Antlers, brought from Germany," which we extract as a grand specimen of the author's powers:—

ON A PAIR OF ANTLERS, BROUGHT FROM GERMANY.

"Gift, from the land of song and wine,—
 Can I forget the enchanted day,
 When first along the glorious Rhine
 I heard the huntsman's bugle play,
 And marked the early star that dwells
 Among the cliffs of Drachenfels!

Again the isles of beauty rise;—
 Again the crumbling tower appears,
 That stands, defying stormy skies,
 With memories of a thousand years,
 And dark old forests wave again,
 And shadows crowd the dusky plain.

They brought the gift that I might hear
The music of the roaring pine,—
To fill again my charmed ear
With echoes of the Rodenstein,—
With echoes of the silver horn,—
Across the wailing waters borne.

Trophies of spoil! henceforth your place
Is in this quiet home of mine;—
Farewell the busy, bloody chase,
Mute emblems now of 'aukl lang syne,'
When Youth and Hope went hand in hand
To roam the dear old German land."

With the chime of this inspiring lyric in our brain we take a reluctant leave of Mr. Fields' volume, trusting that it will not be the last we shall have the pleasure to review. Excellent as the collection is, it probably does not give an adequate impression of the writer's ability, or indicate the limits of his powers either in serious or mirthful composition. It is simply a collection of pieces originally thrown off in the pauses of business, without any idea of their being published in their present form, and they accordingly suggest rather than embody the full force and richness of his intellect. If, however, in the careless play of his mind he can produce a volume so fascinating as the present, we may expect much from its steady and serious exertion, and we trust that no wise saws about the incompatibility of poetry and trade will prevent such an employment of his fine powers.

ART. VIII.—OCEAN STEAMERS.

To the Editor of the Merchants' Magazine and Commercial Review.

ALL directly interested in mercantile matters feel the important influence of Ocean Steam Navigation, and therefore much conversation occurs about each new route and each new steamer. We probably take more interest in them than any other nation, having only commenced three years since, and having more natural taste for sailing craft and steamers than any nation except England.

The dimensions and many particulars of new steamers are published in our leading commercial newspapers, but no idea is thus given of their peculiarities of model, speed, sea-worthiness, and capacity for coal and freight, and of course no mention is made of faults or imperfections. I was sorry to notice in American newspapers so much directly and indirectly in favor of our first built steamers, the writers appearing to forget that they were our first attempts, and therefore not likely to equal those of England, built after twelve years' experience, praising them very much, giving the false impression at home and abroad that they were as perfect as anything America could produce for years. No doubt the English interested in such matters are much elated by the evident superiority of the Niagara, Canada, Europa, and America, over any American steamer yet running, particularly as most of them probably think the Hermann, Washington, and United States equal to anything we have, when really the two first were our poorest as well as our first attempts at Ocean Steamers, and the last is too much like a full sailing-packet to be very fast. She is a fine sea-boat, and has a good strong engine, but would not excel the old English steamer Great Western in speed or any good quality much.

We do certainly excel the World in building and completing sailing vessels and river steamers, and we will soon do it in Ocean Steamers; indeed, four now afloat will do it, they are the Atlantic, Pacific, Empire City, and

Georgia, now receiving their engines at New York. Two years since our first Ocean Steamer was about completed, and the improvement in every particular has been very rapid, partly, however, that our first attempts showed at once and most plainly very important faults. The models of the Washington and Hermann were quite defective, particularly so in having a very narrow bottom, caused by the very easy bilge, which made them load deep and be tender or even crank at all times. Their sterns were also heavy enough for a full sailing ship, and the weight at and near the deck much too great; besides, they were rather too deep or too narrow for their length; their engines also were not quite strong or stiff enough in some of their parts. They can never be made equal to steamers built since. The Northern and Southern have done very well in spite of a low wide transom, making a stem like the side of a house. The Crescent City is a fine steamer, and much improved by having her guards raised five feet, about six months after she started on her first trip; still she will not nearly equal the Empire City, just launched and intended to run with her. Cherokee, Tennessee, California, Panama, and Oregon are very creditable to all connected with them, but within a year we shall have steamers running far superior to them. The Falcon's cylinder is placed at an angle of about forty-five degrees, and I like the plan of engine better than any I have seen for sea-going steamers. Her bottom is beautifully shaped, but her stern is rather heavy for a steamer, her guards much too low, and her light and deep load water lines too full about the ten to fifteen feet at ends of vessel, where the water first and last touches her. Besides New York, no place in the United States has produced an Ocean Steamer except Baltimore, and she but one, but that one is a credit to every mechanic who worked on her. The Isabel is equal to any boat now running. The modeling and style of work on vessels has improved wonderfully at Baltimore within two years, and the engines built there for the boats running from there to Norfolk through winters for six years or more without accident are sufficient guaranties for Baltimore Marine Engine Builders. The Atlantic and Pacific, of about 3000 tons each, built at New York, to run from there to Liverpool, with three others yet to be built, have just been launched. Their hulls are very perfect, resembling each other very much, and are also like the Empire City, of 1600 tons; but she, being modeled since, is a slight improvement, so I will give some particulars of her model, thinking that when she first starts she will be the most perfect boat in the world. She is 228 feet long, 40 feet beam, and 24 feet hold; she has a very long and very wide floor, draws same water forward and aft, stem nearly plumb, stem-post quite so; stern round, and very small and light; the water-lines at light load and deep load marks very sharp, so water will meet and leave her very smoothly; all the water-lines are about straight at first 10 or 15 feet from ends of vessel to open and leave the water, and then easy natural curves; indeed, the same kind of lines one sees on models or hulls of the Knickerbocker, South America, Bay State, Isaac Newton, C. Vanderbilt, State of Maine, and other fine river or alongshore boats. She is the sharpest Ocean Steamer yet built, but I think, ere long, they will be even sharper, and also rather longer in proportion to breadth and depth; for speed, length is more important than anything except the requisite sharpness of ends. Formerly a very sharp craft was not thought safe in bad weather and in bad places; but now it is proved, by pilot boats and clipper-built fishing and oyster craft, that the sharper the craft the safer if well balanced and the parts properly proportioned. The Georgia was built by Messrs. Smith & Dimock,

to run from New York, via Havana and New Orleans, to Chagres; is about 2,600 tons; her chief peculiarity is in being very much sharper forward than aft, as if, after the model was made, she had had some 20 feet added to her forward; she is still a beautiful vessel, and the extreme flare on stern forming a solid head has a beautiful appearance; but all S. & D. turn off appear well; they have taste, and what helps it much finish all their work neatly; still they use as good material as any one in the United States, and their work does not require a finish to hide imperfections. The war steamer built at Kittery, just launched, is a credit to all connected with her from commencement to present time. She is much like *Empire City* in model. Three others are at Brooklyn, Philadelphia, and Norfolk. Two of the three are to have one propeller each, the shaft of which will come out alongside rudder-post, so the wheel will be abaft the rudder, an awkward weight to place at the end of a long hull; whether it is fitted to hoist out of water or not I do not know, but am sure if it does or does not, it will have many objectionable qualities. One very serious one will be the great strain on the last bearing of shaft, as there can be no bearing abaft wood-ends. The plan R. F. Loper proposes, described hereinafter, would answer perfectly for them, and I am surprised enough was not known by those in authority to cause them to adopt it. For once England is far, far ahead of us in adopting one of our best inventions freely, while we entirely neglect it.

A sailing vessel should have rather more body forward than aft, though water lines should be of the same kind, merely being a little sharper aft than forward, as pressure of wind on sails has a tendency to bury bows; but a steamer having no such tendency should be the same at water's edge and below it aft as forward, on every water-line. On account of a steamer's great length and sharpness of ends, those ends at and above the deck should be light; any great weight there would be very apt to hog or strain the vessel. The wheels and greatest weight of engine should be as nearly amidships as possible. The lower the great weight of the engine the better for it and vessel; it will have less chance to work out of line and the vessel be stiffer when light.

At first we made our Ocean Steamer engines too light, as in river boats we put light pieces of wrought iron where English put heavy cast; we had strength enough, but not stiffness enough; no doubt we can now make engines sufficiently strong and stiff without being ridiculously heavy, as are the English engines. The lighter the engine the better, if only strong and stiff enough for hard weather. Americans pay enough for their engines now, and at the same cost they have paid for imperfect engines, we will have perfect ones;—experience is all we wanted and that we are beginning to be guided by, to much advantage.

It is not English boats we shall find so hard to beat, but Scotch; except vessels of Joseph White, Cowes, and some few others who build yachts and Mediterranean and India clippers, the most neat craft I have seen were built in Scotland—Cunard steamers were built there.

For passages averaging fifteen days, the paddle wheel at present is best; but for longer trips I prefer the submerged propeller, fitted to hoist clear of water or on deck, through a well, from its place between real and false stern posts, as patented by Loper and successfully used in England three years or more. I believe the invention to be American, but some Englishmen learned of it and patented it in England at once. Loper's plan is to have two stern-posts, with a space of four or five feet between them, in which slides up and

down, with help of tongue and groove, steadily, a metal frame in which propeller of three arms is secured; on disconnecting, this frame can be hoisted clear of water by a capstan over it or a winch at the mizzen-mast; it can also be hoisted on deck, and in case of accident to one propeller a spare one can be put in the frame. The vacant space left is proved by the English not to injure sailing or steering of the vessel. The rudder to be on the after stern-post, and the strength required by vessel aft to be at and forward of forward stern-post. A vessel on this plan could at any time become a sailing vessel in five minutes, and would only require time enough to heat the water to become a steamer. Steaming ten or fifteen days at different times in a passage of forty or sixty days, would make a vessel average two knots per hour more than now; she would not be humbugged by calms and light winds, but steam through them into a breeze, and then having no wheels or guards to drag in the water, could become a perfect fast sailing vessel; thus combining all the good qualities of steamer and sailing craft with few of the inconveniences of either. Such a craft could make a 40 or 60 days' passage, or if fortunate in having fresh fair winds, longer without stopping for coal; a propeller requires a smaller engine and less coal per hour to drive a craft eight knots per hour than a side wheel; the propeller works steadily in solid water, and there is no power lost in burying one wheel deep in water and lashing water into foam with the other—no being too light or too deep for proper dip of paddles, and no guards to force against sea and wind. The whale, porpoise, shark, dolphin, and many other swift fish get most of their speed by a motion of the tail, which, drawn on paper, would be the same as that of the propeller. Americans have got only 11 knots per hour speed from the propeller, and the English 20, and some say even more. The difficulty in obtaining 20 knots per hour by the propeller, is in obtaining 100 or 120 revolutions of the propeller per minute, while the engine was making 25 and 30; high pressure would permit running the engine to 100 or 120, but salt water demands a low pressure engine, and a low pressure engine should not make more than 25 or 30 revolutions per minute. Among the many craft on this plan the English have, I have thoroughly examined one, the experimental steamer of war "Rattler," of 750 tons. She was rigged as a bark, with enormous courses and plenty of sail low down, topsail and topgallant yards were rather short for her tonnage, and masts above lower masts short. As a sailing vessel she was remarkably fast, beating for two years the whole experimental squadron on the coast of England, and always steered remarkably well; as a steamer she never went over $9\frac{1}{2}$ knots in smoothest water, yet in a 20 days' run will beat any war steamer England had two years since, when she was selected on that account to take Lord Howden to Buenos Ayres, and proved her selection to be well judged by making the best passage then on record, beating the French side-wheel steamer, that took the French minister.

I think this the only plan now in use fit for Ocean Steamers, except the common paddle wheel; the propeller that does not hoist out of water must stop the vessel very much even when disconnected from engine. Errickson's plan of one propeller abaft the rudder, and having an arm to it to hoist it up to stern when disconnected, as in the Massachusetts and Edith, can only work decently in smooth water; and where it is most necessary for it to work correctly, namely, in rough water, it would not work at all, the great weight astern of the vessel, having the motion of the vessel and leverage of the hoisting arm to make it unruly, would be more than the crew could well manage, or machinery or stern frame of vessel well bear. Hunter's plan of a

submerged horizontal wheel is an exploded humbug, it can never do any good. To Loper's plan I see no objection, and the English have found none. This kind of steamer should be rather wider than most steamers, and be provided with about as much canvas as a clipper of her depth and breadth, low down as much as possible, and on account of great length on four masts. Dimensions might be 225 feet long, 35 feet beam or even 36, and 20 feet deep. Such a craft might sail as fast as any craft afloat, and steam 12 knots in smooth water easily; under both steam and sail her speed would be astonishing. The chief advantages of the plan are its extreme simplicity, and the ease with which it can be applied to any vessel of proper model, by adding a false stern.

J. E. G.

SALEM, Mass., April 5th, 1849.

MERCANTILE LAW CASES.

DENIO'S SUPREME COURT REPORTS.

WE propose to notice some of the mercantile cases in the several volumes which form Denio's series of Reports of the Decisions of the Supreme Court of the State of New York, as it existed prior to the organization of the Judiciary of this State under the new Constitution.

Hiram Denio, a counselor of deserved eminence in his profession, was appointed reporter of the Decisions of the Supreme Court of this State in the year 1844. He succeeded Nicholas Hill, Esq., the learned reporter of the series following Mr. Wendell's Reports. The justices of the Supreme Court of the State of New York, during the time of the decisions contained in the four volumes of Denio's Reports, were Green C. Bronson, Chief Justice, and Samuel Beardsley and Freeborn G. Jewett, Associate Justices; and we may remark in passing, that our Supreme Court, during the time of these four volumes of reports, although in its last years of existence under the old *regime*, appears to have lost nothing of the pristine vigor and talents which adorned the bench of the State in the days of Spencer, Kent, Platt, and Savage.

RIGHT OF STOPPAGE IN TRANSITU. We will first refer to the case of *Mattram and Sons vs. Heyer et al.*, in volume first, page 483. This was an action originally entered in the Superior Court of the city of New York, and was in replevin for a cask of hardware. The goods were shipped at Liverpool and consigned to the defendants, they paying freight. The plaintiffs were manufacturers in England, and had sent the goods upon an order on a credit of four and six months. They arrived in New York on the 7th of April, 1842. On the same day the defendants received a bill of lading, and paid the freight, and sent the goods to the custom-house, where they remained in the public warehouse until the 29th of April. On the 28th of April the defendants had become bankrupt, and the plaintiffs demanded, by their agent, the possession of the goods, on the ground that they had a right to a stoppage *in transitu*, they not having received payment for the same when the bankruptcy took place. The defendants had gone to the custom-house on the 29th of April, paid the duties, and took the goods into their store; and at the time the writ of replevin was sued out, the cask in which the hardware was imported had not been opened. The judge who tried the cause in the Superior Court, charged the jury that the plaintiffs were not by law entitled to maintain this action; and that, by the receipt of the bill of lading, and the payment of the freight, and the entry of the goods at the custom-house by the defendants, the *transitus* of the goods was ended, and the plaintiffs could not stop the goods, though the defendants had not paid for them, and had become bankrupt. Thereupon a verdict was rendered for the defendants, and judgment being entered on the verdict in the Superior Court, the plaintiffs bring error.

Bronson, Ch. J., delivering the opinion of the Supreme Court, affirmed the judgment below, and said that "Goods may be stopped so long as the transit continues, whether by land or water, from the consignor to the consignee; and whether they are in the hands of the carrier, a warehouse keeper, wharfinger, or any other middleman connected with the transportation. The right of stoppage ceases when the goods have reached their place of destination, and have come to the actual, or constructive possession of the consignee."

The learned Judge further said, that the goods, in this case, had reached their place of destination. The carrier had completed his work and received his freight, and the defendants had entered the goods at the custom-house, where they remained at the risk and charge of the defendants.

"I cannot doubt," says the learned Chief Justice, "that the *transitus* was at an end before the plaintiffs attempted to regain possession of these goods."

It appears, by the decision of this case, that whenever the consignees, or their agents, have once paid the freight of the goods, that the right of a stoppage *in transitu* ceases, and the possession of the goods, either actual or constructive, is complete in the consignee.

PRACTICE IN CASES WHERE PARTIES ARE RESIDENTS OF DIFFERENT STATES. The next case we notice is that of *Suydam vs. Smith*, found at page 263 of the first volume.

This was a case where certain citizens and residents of the State of Ohio became indebted, on a mercantile transaction, to the commercial firm of Suydam, Sage, and Co., who resided in the city of New York. One or more of the defendants came to Buffalo in the month of February, 1845, where they were arrested upon a *capias*, issued out of the Supreme Court of the State of New York, and held to bail in the sum of \$30,000. The defendants petitioned the Supreme Court that this cause might be removed for trial into the Circuit Court of the United States, to be held in the Northern District of the State of New York, to be there tried, pursuant to the Act of Congress entitled "An Act to establish the Judicial Courts of the United States." (1 Story's Laws U. S., p. 57, § 12.) The Supreme Court in this cause held, that where one only of several defendants is arrested, all the defendants must enter an appearance in this court at the time of their presenting their petition to remove the cause into the Circuit Court of the United States, but that they need not put in special bail in the court below; that the defendants should, upon presenting such petition, give a bond, or security, as required by the Act of Congress, that the petitioners will enter at the next Circuit Court, on the first day of its session, copies of the process against them, and appear in the Circuit Court by entering special bail; and thereupon the court below will order the cause to be removed into the United States Circuit Court.

The report of this decision contains a note at its close referring to the several decisions upon this interesting question which have been made in the United States Circuit Courts and the State courts in New York. We commend these to the notice of our professional readers.

COMMON CARRIERS. The case of *Fisk vs. Newton*, found at page 45 of this volume, decides that a carrier of goods, when he has safely conveyed the same to the place of destination, according to his agreement, and the consignee is dead, or absent, or refuses to receive the goods, or is not known, and cannot be found after reasonable efforts, will discharge himself from further responsibility if he places the goods in a warehouse, or store, with some responsible person, at the place of destination, for, or on account of the owner. In such a case the store-house keeper becomes the agent or bailee of the owner of the property.

DELIVERY OF GOODS SOLD. In the case of *Shindler vs. Houston*, page 48, it was held that when, upon a sale of personal property consisting of heavy articles, such as lumber, which had been previously measured, and the vendor and vendee both appear at the place where the property is located, and agree upon a sale by words (*in præsenti*), and there is nothing further to be done to ascertain the quantity, quality, and value of the articles, the property, by this transaction, is deemed in law to be delivered to the vendee, and the sale is consummated, the property vesting in the vendee, though payment is postponed until a future day.

or the happening of a future event. This transaction is held, by the learned judges of the Supreme Court, to be a valid sale and delivery of goods, and a compliance with the requisitions of the Statute of Frauds.

LIMITATION OF EQUITABLE DEMANDS. We will next call the attention of our readers to the case of *Lawrence and others vs. The Trustees of the Leake Estate*, found in volume 2d, page 577. This was a suit in equity, to recover the sum of \$50,000 from the defendants below, who were the executors of Augustine H. Lawrence, deceased. The demand originally was for money lent to A. H. Lawrence & Co., a firm which consisted of A. H. Lawrence, and his son, A. N. Lawrence. Mr. Leake died June 2d, 1827, and left a large estate, to be disposed of according to the directions of his will. The firm of A. H. Lawrence & Co. were the brokers and bankers of Leake, and as such were accustomed to receive the interest, and dividends, and other moneys of the testator, and to invest them for him in stocks and other securities. These transactions continued until the death of the testator, and there was an entry on the books of the firm of \$500 to the credit of the testator on the first of June, 1827, the day before he died. The principal partner in the firm of A. H. Lawrence & Co. died September 10, 1828, after which a pass-book was found among his private papers, which had belonged to Leake, the testator. This pass-book revealed the fact, which the firm had before denied, that at the time of the decease of the testator, the firm of A. H. Lawrence & Co. owed the testator \$50,000, which had been loaned to the firm July 1st, 1826, at a rate of interest of 5 per cent. The suit was first commenced against A. N. Lawrence, the surviving partner of the firm, in April, 1831, and judgment was finally obtained against the survivor, on the 23d March, 1838, for \$50,000 and interest; but in the meantime, in the year 1834, the survivor and defendant in this action, A. N. Lawrence, had become insolvent. The plaintiffs now sought, by a bill in equity, to collect this judgment out of the estate of Augustine H. Lawrence, who had died on the 10th of September, 1828, ten years before. His executors were made parties defendant to this latter suit, which was begun June 30th, 1838. The cause came on for hearing, before Vice-Chancellor Murray Hoffman, in November, 1841, when a decree was rendered for the payment of the demand, and interest, amounting to \$102,643 94, together with the costs of suit. On this decree an appeal was entered to the Chancellor, who affirmed the decree, and then to the Court of Errors, when the decree was unanimously affirmed in December, 1845. Thus was finally determined a litigation of fifteen years and eight months. In this cause the courts came to the following conclusions:—

1st. That the relation of the Messrs. Lawrence was to the testator Leake that of agents and brokers, and of a fiduciary character; and that the Statute of Limitations did not commence running until a demand was made, by the representative of the testator, for the payment of a balance of accounts. It appeared by the evidence that the administrator, with the will annexed of the testator, had applied to the firm of A. H. Lawrence & Co. for a settlement of the accounts between them and the testator. This was in June, 1827. A. H. Lawrence, the principal partner, denied that the firm was indebted to the testator in any considerable amount, and exhibited an account, showing an indebtedness from the firm of only about \$500, which he paid on demand, and denied the existence of the pass-book, which was afterwards found among his own private papers after his decease. The Court further held, that the continuation of the accounts of the parties down to the time of the death of the testator in June, 1827, revived all previous items, and constituted the true balance, and an actual indebtedness at that time of the agents to the testator, and prevented the running of the Statute of Limitation of the State of New York, which is in the following words:—“Bills in equity for relief, in case of the existence of a trust not cognizable by courts of common law, are not within the limitations of this statute; and in all other cases not herein provided for, shall be filed within ten years after the cause of action shall accrue, and not after.” (2 R. S. p. 301, § 52.) It will be perceived that the right of action accrued 2d June, 1827, but the bill of complaint to enforce this claim against the executors of A. H. Lawrence was filed June 30, 1838, eleven years and twenty-eight days afterwards.

2d. That it is a well-settled rule, that the Statute of Limitations commences to take effect, in cases of fraud, from the time of the discovery of the fraud, and not from the time of its commission.

3d. That in matters of controversy in chancery, when the claim is purely of an equitable nature, the Statute of Limitations has no application, and the court will apply the doctrine of neglect and lapse of time, according to discretion, regulated by precedents and the peculiar circumstances of each case.

4th. That when the testator deceased, the claim of \$50,000 was on interest at 5 per cent; but from the time when payment of the principal debt was demanded in 1827, interest became due at the rate of 7 per cent, according to the New York statute fixing this rate on contracts where no agreement had been made.

5th. That there was no right of action, or suit against the executors of A. H. Lawrence, deceased, who died in 1827, for the recovery of this debt, either at law or in equity, until after the failure of the surviving copartner in 1834.

PARTNERSHIP. It was further held in this case—

6th. That a creditor of a copartnership firm, on the death of one of its members, cannot sustain a bill in equity against the representatives of the deceased partner and the surviving members of the firm, nor against such representatives alone, without averring and proving that such surviving partners are insolvent; and that the creditor is bound to proceed at law against the surviving partners, who alone are debtors, to recover his demand, and can only resort to a court of equity, against the estate of the deceased partner, after the insolvency of the surviving partners, or failure to pay the demands.

7th. That a debt of this nature is joint, and not several, against the surviving partners of the firm.

8th. That before the estate of a deceased partner can be made liable, it ought to appear that the surviving partner is unable to pay; and that the creditors should exhaust all legal remedies against the surviving partners, before they call upon the representatives of the deceased partner.

9th. That this is on the ground that the partnership funds are by law appropriated to the creditors of the firm, and the creditors ought to show that this fund is exhausted before they can resort to the estate of the deceased partner.

FIRE INSURANCE. INSURABLE INTEREST. We will next call the attention of the reader to the case of Howard & Ryckman vs. The Albany Insurance Company, found in volume third, page 303. The plaintiff Howard had obtained a policy of insurance for one year, against loss or damage by fire, to the amount of \$10,000, on a brewery; and on the stock and utensils therein. The policy was obtained in February, 1842, in the name of Howard alone; but soon after the policy had been issued, the plaintiff Howard sold out one-half of the whole property to Ryckman, the co-plaintiff. In the following December it was destroyed by fire. The plaintiffs sought to recover the amount of this policy.

Chief Justice BRONSON, in giving judgment in this cause, held the doctrine, that when the assured has no interest in the property at the time the contract for insurance is made, the policy is a mere wager, in which one party stakes the sum insured, and the other the premium paid, upon the happening or the not happening of a particular event, and that such a contract is void by our statute against gaming. In this case it appeared that, at the time of the fire, the plaintiff Howard owned one-half of the property covered by the policy. The learned Chief Justice held that he might recover in respect to his one-half interest, remaining in the property; but the two other justices of the court, Beardsley and Jewett, overruled the Chief Justice, and held that the plaintiffs could not recover any portion of the loss, because they had no joint interest in the property at the time the loss happened. This decision, we presume, was predicated upon the statute of the State of New York, which declares that joint owners of real estate shall be tenants in common, and not joint tenants, unless so made by the terms of the grant; and also upon the further ground, that no privity of contract existed between the underwriters of the policy and the purchaser Ryckman of one-half of the property from Howard after the making of the contract of insurance.

COMMERCIAL CHRONICLE AND REVIEW.

THE MONEY MARKET—PAYMENT OF THE INTEREST ON STATE DEBT OF PENNSYLVANIA—RATES OF EXCHANGE IN NEW YORK ON AMSTERDAM, HAMBURG, AND BREMEN—BOSTON BANK DIVIDENDS FROM 1846 TO 1849—NEW YORK BANK DIVIDENDS IN 1848 AND 1849—EXPIRATION OF CHARTERS OF SEVERAL NEW YORK BANKS—DEMANDS FOR MONEY BY RAILROADS—IMPORTS OF PORT OF NEW YORK—EXPORTS OF PORT OF NEW YORK—GRAIN AND FLOUR IMPORTED INTO GREAT BRITAIN—DEMAND FOR BRADSTUFFS IN ENGLAND—CALIFORNIA EMIGRATION—INFLUENCE OF EMIGRATION ON THE MONEY MARKET, ETC., ETC.

During the month, money has continued to be exceedingly scarce and high in price in all the Atlantic cities. It would seem to be the case that the spring business has been more tardy than usual, and that the influence of the California fever thus far has been to interfere with the regular course of business. Considerable numbers have left all parts of the Union, carrying an important amount of capital in the shape of goods, and possibly \$2,000,000 in coin. There have, however, arrived in New York, for the quarter ending March 31, over 26,000 immigrants from Europe, and probably these have brought as much coin as the California adventurers carried away. The departure of such a number of active men, with all the means they could command, enlivened in some degree the retail trade of the cities for a time, but has in the main enhanced the price of money and checked the payments from the interior. It was also the case that numbers who did not go, under the expectation of an active business resulting from the arrival of the gold, extended their operations, and entered into obligations that now required aid to meet. In the eastern cities more particularly has the demand for money been good, and certain parties, taking advantage of the state of the London market, remitted \$1,000,000 of Massachusetts 5 per cent sterling stock to realize specie for the relief of the Boston market, and the paper of the leading houses has been offered freely at rates as high as 1 $\frac{1}{2}$ per cent per month wherever there was a possibility of borrowing. It is exceedingly gratifying to find that, while the demand for American stocks abroad is improving, the character of the stocks is generally improving. This is more particularly applicable to Pennsylvania. In an article upon the debt of Maryland in the fore part of this number, we had occasion to remark that Pennsylvania alone degraded herself by paying her interests in depreciated paper. This, we are pleased to say, has been remedied; the Legislature of the State of Pennsylvania having agreed to enforce the law passed June 12th, 1840, relative to the payment of interest on the State debt. That law reads as follows:—

Resolved, That, hereafter, the interest falling due on Pennsylvania stock shall always be paid in specie, or its equivalent; and whenever the funds accumulated in the treasury for the payment of interest shall be of less value than specie, it shall be lawful for the governor, and he is hereby required, to cause the difference in value between such funds and specie to be ascertained and certified to him on the day preceding that on which any semi-annual portion of interest becomes due by the Auditor-General and State Treasurer, under oath or affirmation, and thereupon to issue his warrant to the agents or banks who may be authorized to pay such interest on behalf of the Commonwealth, to allow such difference in value to the holder or legal representative of the holder of any Pennsylvania stock, on the interest due to such holder, or to pay the same in specie, if required by such holder.

This law has been suspended for several years, by a proviso in the appropriation bill of each year, requiring the State Treasurer to pay the interest in such

funds as were in the treasury. This proviso has been struck out this year, and the law comes again into force. The paper of leading New York houses has sold freely at similar rates. At the same time bills are very low, by reason of the considerable exports of stocks, in addition to farm produce and cotton, from the United States, and the scarcity of money, which prevents the ready remittance by importers. The rates of foreign bills in New York have progressed as follows:—

RATES OF EXCHANGE IN NEW YORK.

	Sterling.	Paris, 60 days.	Amsterdam.	Hamburg.	Bremen.
December 1	8½ a 8½	5.27½ a 5.25	40½ a 40½	35½ a 35½	78½ a 78½
“ 15	8½ a 9	5.30 a 5.25	40½ a 40½	35½ a 35½	78½ a ..
January 1	8½ a 9	5.27½ a . . .	40½ a 40½	35½ a 35½	78½ a 78½
“ 15	8½ a 9	5.30 a 5.25	40½ a 40½	35½ a 35½	78½ a 78½
February 1	8½ a 8½	5.32½ a 5.25	40½ a 40½	35½ a 35½	.. a 78½
“ 15	8 a 8½	5.31½ a 5.27½	40½ a 40½	35 a 35½	78½ a 78½
March 1	7 a 8	5.32½ a 5.30	40 a 40½	34½ a 35	77½ a 78½
“ 15	6½ a 7	5.37½ a 5.32	39½ a 39½	34½ a 34½	77½ a 78
April 1	5 a 6½	5.37½ a 5.32	38½ a 39½	34½ a 34½	76½ a 77½
“ 15	4½ a 6½	5.37½ a 5.35	39 a 39½	34½ a 34½	76½ a 77

The business for the packet of the 1st April was quite large notwithstanding the scarcity of money, but the supply of bills produced a considerable fall. The activity of the demand continued for the packet of the 16th, but was met by an ample supply. All these are indications that the importations of specie from London will be considerable in the months of May and June. It may be estimated that the arrangements made will produce an import of about \$5,000,000 from Europe, \$500,000 having arrived in the packet of the 7th. The rate of money in London being 2½ a 3 per cent, and in New York 12 a 15 per cent, an equalization must before long take place. Some quantities of gold are also to be expected from California, but scarcely before June in any important amount. The continuance of the demand for money has given high profits to banks. The following are the dividends of those of Boston:—

BOSTON BANK DIVIDENDS.

BANKS.	1846.		1847.		1848.		1849.	
	Capital.	p.c.	Am't.	p.c.	Am't.	p.c.	Am't.	p.c.
Atlas	\$500,000	3	\$15,000	3	\$17,500	3	\$17,500	3
Atlantic	500,000	3	15,000	3	17,500	3	17,500	3
Boston	900,000	3½	21,000	3½	31,500	4	26,000	4
Boylston	300,000	5	7,500	4	6,000	4	6,750	4
City	1,000,000	3	30,000	3	30,000	3½	35,000	3½
Columbian	500,000	3	15,000	3	15,000	3	20,000	4
Eagle	500,000	3	15,000	3	17,500	3½	17,500	3½
Exchange	500,000	..	..	..	..	4½	22,500	4½
Freeman's	200,000	4	8,000	4	8,000	4	8,000	4½
Globe	1,000,000	3½	35,000	3½	35,000	3½	35,000	4
Granite	500,000	3½	17,500	3½	17,500	3½	17,500	3½
Grocers'	250,000	..	..	..	..	..	..	..
Hamilton	500,000	3½	17,500	3½	17,500	3½	17,500	3½
Market	500,000	4½	25,000	4½	25,000	5	25,000	5
Massachusetts	800,000	3	24,000	3	24,000	3	24,000	3
Mechanics'	120,000	4	4,800	4	4,800	4	4,800	4
Merchants'	3,000,000	3½	105,000	3½	105,000	4	120,000	4
New England	1,000,000	3	30,000	4	40,000	4	40,000	4
North	750,000	3	22,500	3	22,500	3	22,500	3
Shawmut	500,000	3	15,000	3	15,000	3½	17,500	4
Shoe & Leather Deal.	500,000	4	20,000	4	20,000	4½	22,500	4½
State	1,500,000	3	54,000	3	54,000	3	63,000	4
Suffolk	1,000,000	4	40,000	5	50,000	5	50,000	5
Traders'	400,000	3	12,000	3	14,000	3½	14,000	4
Tremont	500,000	3	15,000	3	17,500	3½	17,500	3½
Union	800,000	3	24,000	3½	28,000	3½	28,000	3½
Washington	500,000	3	15,000	3	17,500	3½	17,500	3
Total	19,280,000		\$603,000		\$652,300		\$702,500	

* Eight months.

The Boylston Bank, which went into operation December, 1845, has, since last October, added \$50,000 to the capital. The Exchange Bank started in 1847; and the Grocers' Bank, with a capital of \$250,000, has gone into operation since October, 1848. The excess of dividends, given above, over those for the previous six months, amounts to \$11,250, caused mostly by an increase of capital. The average rate of dividend declared on the aggregate capital of the Boston banks for the six months ending April 2d, was about 3½ per cent. This is about equal to the dividends declared by the banks of New York. Of the banks in Boston, two have declared 10 per cent, during the past year; one 9 per cent; one 8½ per cent; four 8 per cent; three 7½ per cent; eight 7 per cent; three 6½ per cent, and two 6 per cent. Banking capital at Boston is not legally entitled to so high a rate of interest as in New York; consequently it has to be more actively employed to give corresponding dividends. Such of the banks of New York, however, as have made dividends in 1849, compare with the corresponding dividends of the previous year as follows:—

NEW YORK BANK DIVIDENDS.

BANKS.	Capital.	1848.		Amount.	1849.	
		1st.	2d.		1st.	Amount.
Butchers and Drovers'.....	\$500,000	5	5	\$50,000	5	\$25,000
Leather Manufacturers'.....	600,000	3½	3½	42,000	4	24,000
Tradesmen's.....	400,000	5	5	40,000	5	20,000
Merchants' Exchange.....	750,000	4	4	60,000	8	60,000
Seventh Ward.....	500,000	3½	4	37,500	4	20,000
North River.....	655,000	4	4	52,400	4	26,200
Bank of America.....	2,001,200	3½	3½	140,084	3½	70,042
Phoenix.....	1,200,000	3	3	72,000	3½	42,000
Bank of Commerce.....	3,447,500	3½	3½	240,082	4	137,900
National.....	750,000	4	4	60,000	4	30,000
Mechanics'.....	1,440,000	4	9	187,200	4	57,600
Manhattan.....	2,050,000	8	8	122,000	3½	71,750
Chemical.....	300,000	.	.	.....	6	18,000
Total.....	\$14,593,700			\$1,024,082		\$602,492

From this result, it appears that the average dividends on bank capital in New York has been 3.73 per cent against 3.82 per cent in Boston. This is a very singular result, and illustrative of the operations of usury laws. The legal rate of interest in Massachusetts is 6 per cent, and in New York 7 per cent; yet institutions incorporated for the lending of money are enabled, after paying all expenses, to declare profits at the rate of 7.64 per cent per annum in the former State against 7.46 per cent in New York. In a State where the law makes the legal profit of the money-lender 1 per cent less than in New York, he actually earns 1.5th per cent more than in New York. This affords a problem for solution by those who contend that the law *can* diminish the price of money. The legitimate effect of these large profits is seen in the multiplication of the stocks. Thus the bank capital of Boston has increased as follows:—

Years.	Capital.	Dividends.	P. cent per an.	Years.	Capital.	Dividends.	P. cent per an.
1843....	\$17,010,000	\$834,000	4.09	1847....	\$18,180,000	\$1,281,300	7.04
1844....	17,480,000	907,100	5.19	1848....	18,920,000	1,428,350	7.52
1845....	17,480,000	1,112,100	6.36	1849....	19,280,000	1,452,600	7.64
1846....	18,180,000	1,196,000	6.57				

The dividends of the first six weeks of 1849 give a rate of increase for the
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present year. It is supposed that where increasing capital gives increasing profits, that the movement will be progressive. The value of money in New England has undoubtedly been affected by the large operations of the railroads, simultaneously with the general demand for most purposes consequent upon confidence in general prosperity; and the general extension of business engagements has produced that desire to borrow manifest in the quantities of eastern paper that is offering wherever money is to be had.

That the progressive dividends of the New York banks have not produced similar results upon the employment of capital, is to be ascribed to a considerable extent to the continual strife between the old chartered banks and the institutions started under the free banking law. The new Constitution of the State of New York required that, after 1849, the "individual liability clause," as it is called, should be enforced, and this has been done by an act of the Legislature, declaring that, after the first day of January, 1850, stockholders shall be liable for any debt, with interest, to the amount of their respective shares of stock. As a protection to stockholders, however, it provides that one or more, representing one-twentieth of the capital, may at any time apply to any justice of the Supreme Court for an order declaring the concern insolvent. The undefined dread of this liability clause operated adversely to the banking interests, and caused rather a disposition to sell, than to buy more or create new stock. This feeling, on more mature consideration, has passed away. As the charters of the old banks expire they now come under the free banking law, and operate quite as well as under the old system. Already four of the New York city banks have undergone this transition, namely, the Fulton, North River, Chemical, and Merchants' Exchange Bank; and although some of the officers of the old corporate institutions strive to fight against the new law, it does not appear that, under skillful and judicious management, the change produces any detriment. Thus the last four dividends of the North River amount to 16 per cent, while those of the Leather Bank, of nearly equal capital, under the old law, amount only to 14½ per cent, and the Chemical Bank has declared 6 per cent for the last six months. The Merchants' Exchange Bank has declared 8 per cent for the last semi-annual dividend under the old law, and it will doubtless do better under the same skillful management in its new character. Its charter expires in June, 1849, and already it is organized under the free-banking law. A great deal of the agitation in relation to banks has been kept up through the unwise conduct of those who indulge prejudices in favor of the corporate plan. As we have seen, the profits of the stockholders increase under the new system; and although that requires that the circulation shall be secured, that security is not more desirable for the public than for stockholders when the latter have become individually liable for the debts of the concern. This conflict of the two systems, and the transition state of the banking capital, has been a leading cause of its stationary amount whenever the rate of profit that yields is on the increase.

The demands of the railroads for money are somewhat on the increase, and during the month the New York and Erie Railroad put on the market \$500,000 of the new loan of \$4,000,000, 7 per cent ten year mortgage bonds, and these were taken at 85 a 85½ per cent, a rate which yields nearly 8½ per cent for the investment. At this rate, however, the bids exceeded the demand by \$120,000. Nearly \$100,000 of the New York and New Haven Railroad 7 per cent bonds were also

taken at 91½ & 92, and Hudson River Railroad bonds to the extent of \$500,000 are also offering on the market. The Massachusetts Joint Standing Committee on Railroads and Canals have reported that the following corporations have asked for an extension of time for locating and constructing railroads of the present Legislature, namely:—

	Capital.		Capital.
Barre and Worcester.....	\$1,000,000	Newburyport, constructing....	\$200,000
Fitchburg (Lancaster and Sterling Branch) estimate.....	180,000	Taunton and Middleborough...	150,000
Fitchburg and Worcester, constructing.....	500,000	Union.....	150,000
Essex, nearly completed, and in operation.....	500,000	Waltham and Newton.....	100,000
Salem and Lowell.....	400,000	Harvard Branch.....	40,000
		Total.....	\$3,170,000

Acts of incorporation have been reported for the construction of new railroads, as follows:—

	Capital.		Capital.
Charles River Railroad.....	\$800,000	Silver Lake.....	\$35,000
Waltham & Watertown Branch	100,000	Quanapowitt.....	60,000
Medway Branch.....	75,000	Dorchester and Milton.....	50,000
Norfolk County Branch.....	50,000	Springfield & Longmeadow...	150,000
Indian Orchard.....	50,000	Fairhaven Branch.....	250,000
Middleborough & Plympton..	150,000	West Dedham Branch.....	150,000
Southbridge & Blackstone....	800,000		
Mount Pleasant.....	150,000	Total.....	\$2,370,000

In addition to the above, two or three other applications for increase of capital, or for acts of incorporation, have been reported upon since the report was made.

These works, together with those of New England, bidding high for money, have much affected the markets. As is always the case under such circumstances, prices have indicated the scarcity of money, and the exports of produce have been accelerated, while the importations have been checked. The imports at the port of New York, for the first three months of this year and of 1848, have been as indicated in the following table:—

IMPORTS INTO THE PORT OF NEW YORK.

	1848.				1849.			
	January.	February.	March.	Total.	January.	February.	March.	Total.
Specie.....	\$48,032	\$49,509	\$29,781	\$127,316	\$57,700	\$21,323	\$130,895	\$309,918
Free	480,829	141,530	2,199,749	2,822,117	525,534	285,117	590,849	1,401,500
Dutiable.....	2,104,104	2,566,859	5,971,601	24,642,564	7,833,710	8,237,786	7,993,478	24,019,966
Total.....	\$2,632,965	\$2,757,900	\$6,191,131	27,584,996	\$8,416,944	\$8,564,226	\$8,630,214	25,631,384
Duties	2,295,038	2,314,909	1,545,099	6,254,946	1,911,465	2,076,609	2,043,396	6,031,469

The gross imports are less this year than last by about \$2,000,000, while the export value of domestic produce sent from this port has exceeded that of last year. The exports are as follows:—

EXPORTS OF THE PORT OF NEW YORK.

	1848.				1849.			
	January.	February.	March.	Total.	January.	February.	March.	Total.
Specie.....	\$1,183,517	\$423,296	\$452,507	\$2,059,250	\$122,582	\$106,851	\$26,506	\$315,939
Foreign, free..	4,496	15,540	99,039	119,075	29,923	42,554	63,303	125,780
“ duties.....	222,629	432,909	216,490	872,068	122,633	308,824	268,287	700,743
Domestic.....	2,456,615	1,979,428	2,184,194	6,620,237	2,109,903	2,190,649	2,687,807	6,988,359
Total.....	\$3,667,257	\$2,861,103	\$2,952,830	\$9,681,250	\$2,384,267	\$2,648,878	\$3,104,903	\$8,140,322

The considerable exports of specie which commenced with the revulsion in England in August, 1847, and continued down to the close of February, 1848, receiving a renewed impulse from the political convulsion in February, have this

year been unimportant, exceeding the reported imports by about \$100,000 only. The quantities of cotton sent forward this year are much in excess of last, as have also been the breadstuffs and provisions. It is remarkable that the good harvests and duties of England during the year 1848 did not operate against the receipt of large supplies of grain in Great Britain from abroad. The quantities of grain and flour imported into the United Kingdom for the several years were as follows:—

GRAIN AND FLOUR IMPORTED INTO GREAT BRITAIN.

	1844.	1845.	1846.	1847.	1848.
Grain.....qrs.	2,522,342	1,344,182	4,305,185	9,436,675	6,994,576
Flour, &c.....cwt.	710,423	632,045	8,586,971	8,633,991	2,042,896

The potato crop of Ireland failed last year, but the crops of England and the Continent were good; and the desire to realize money on the Continent in consequence of the political panics, caused a considerable quantity to go to England that otherwise would have remained in Europe. It has resulted that the supplies have caused prices to rule low in England, laying the foundation for a better general business, consequent upon cheap food and cheap money, should the peace of Europe be preserved. The demand for breadstuffs for the English markets continues good notwithstanding the low prices, and as the considerable supplies that are coming forward influence a fall in prices, the quantities that are purchased for export increase. It may well be doubted, however, whether the sales of internal produce will be so remunerative to the great consumers of goods as to enable them to pay up with the degree of promptness that has been anticipated. Indeed, the tardiness of buyers, and the nature of their demands when they appear, are such as to induce on the part of those city dealers whose purchases were large, corresponding with their expectation rather to hasten sales and close out stocks at rates much less than the early promise of the season indicated. The number of active men from all the States that are seeking California to realize its golden dreams, exerts a marked influence upon general business; and the exertions of friends to furnish forth adventurers in whose success they are interested, affects in a considerable degree the collections and sales of country dealers. The operation is now too appropriate to an extraordinary enterprise all those active means in most neighborhoods that usually applies to the purchase of necessary goods and family comforts, as well as to discharge bills. Many a family scrimps its allowance of necessaries and shortens its purchase of comforts, as well as defers its payments, in order to swell the stock of some member of it who is about to depart to California to find the means of their common fortunes.

This state of affairs, operating upon the expected collections from the interior, is exaggerated in its influence upon the market by the absence of any receipts of gold from the land of promise, on the sea-board. The whole amount, up to this time, received in London is some \$200,000; and an equal amount, perhaps, that has reached the United States, makes up the sum total of all that has been realized to commerce from the many millions that were reported dug up to the date of our last accounts from the gold region. In the meantime many very great disasters have been reported, and more may be anticipated, from the numerous and illy provided companies that have, on scanty information, undertaken a most perilous enterprise. A late account from Independence, Mo., mentions the gathering of several thousands of persons at that point, to start across the country with the appearance of the spring grass. The difficulty of subsisting numerous bands of emigrants,

with their cattle, on the long trail to the trans-montane regions is very great, and much loss of life and treasure will result. But this good will result, namely, that the country will become so well explored, and its resources defined, that the beaten road can hereafter be traveled with comparative safety and success, and by these means a closer connection will be established between the Atlantic and Pacific sections of the Union, and the latter, at no distant day, must rival in commercial power every other nation of the world. In our article for January, 1845, now more than five years since, we remarked, (vol. xii., page 80,) "There is but little doubt that the United States are destined ultimately to command all the trade in the Indian and China seas. The supply of cotton in the United States, including Texas, is far beyond what the wants of Europe require. The wants of China are, however, such as will absorb almost a limitless quantity. The cotton goods manufactured in the United States already supersede those of all other countries in those markets, and American lead has entirely supplanted the English. The English government hope, by commanding the exclusive route to China over Egypt, by way of the Nile and the Isthmus of Suez, (to effect which, a negotiation is now pending between that power and the Pacha,) to obtain news several weeks earlier than it can be had in the United States; an advantage which will give her merchants control of the markets. Their diplomacy may succeed temporarily in this, but the march of events will ultimately give the United States the mastery. Her population is pushing, with a vigorous, rapid, and unceasing march, along a line 1,200 miles in extent, westward, towards the shores of the Pacific. The occupation of the vast territory known as the Oregon, is already going forward; and twenty years will not have elapsed, before a powerful state will have sprung up on the shores of the Pacific. This great tract of the Oregon is drained by the Columbia River and the San Francisco, which debouch upon the ocean at a point six days, by steam, distant from the Sandwich Islands—a group the independence of which is guaranteed; whose population is 100,000, mostly American; the surface, 8,000 square miles; of a soil the most fruitful, and a climate unsurpassed in salubrity. These islands are situated in the middle of the Pacific, on the great highway from Oregon to China. The great whale fishery of these regions is conducted mostly by Americans, numbering 200 vessels, whose annual product is about \$5,000,000. This fleet, in the summer months, cruises between the islands and the coast of Japan for sperm whale, and carry on a large trade in furs, &c., which are now sold in China, and the proceeds, in tea, sent home to the United States. The whole of this vast trade, and that of China, via the Sandwich Islands, will be commanded by the State of Oregon. Those persons are now living who will see a railroad connecting New York with the Pacific, and a steam communication from Oregon to China. For the last three centuries, the civilized world has been rolling westward; and Americans of the present age will complete the circle, and open a western steam route with the east."

How vast an impulse has now been given to that migration which was then impelled only towards Oregon! The commercial resources of the Bay of San Francisco and its affluents have now been added to the Union, and the gold reports are attracting thousands of men who will not be slow to appreciate the natural advantages of the country, which are unsurpassed for commercial resources. That California, with its boundless resources, will speedily become the common centre for the trade of Asia with the old world, is certain. Equally so, that the

warehouse privileges, on the present plan, will enable San Francisco to become the depot for China and Indian goods, to be carried across the isthmus to the warehouses of the Atlantic cities, to be distributed throughout Europe; and these rich freights, in short voyages, will be entirely monopolized by American tonnage, built in Sacramento valleys, of California oak. All Asia, Africa, and New Holland will receive their commercial vitality from California; and all the products of those vast regions, transferred from the warehouses of San Francisco, on American steamboats and railroads, will supply the Atlantic warehouses for European demands, and perfect freedom of navigation will be the chief means of commercial prosperity.

COMMERCIAL STATISTICS.

COMMERCE AND NAVIGATION OF THE UNITED STATES.

We received, on the 29th of March, 1849, the Annual Letter of the Secretary of the Treasury, transmitting the usual report from the Register of the Treasury of the Commerce and Navigation of the United States for the fiscal year commencing on the 1st day of July, 1847, and ending on the 30th of June, 1848. Last year we did not receive the same document for the previous year until the close of May, 1848, two months later than this year, but several months earlier than the usual time of its publication in former years. We have, as will be seen by referring to previous volumes of the *Merchants' Magazine*, urged Congress to adopt the system of the British government in regard to public documents emanating from the Executive Department, and by law require them to be prepared immediately after the close of the fiscal year, and printed before the meeting of Congress. This plan meets the approval of every member of Congress to whom we have mentioned the subject; and the Hon. HENRY NICOLL, of New York, introduced, during the first session of the last Congress, a joint resolution, making it the duty of the Secretaries of State, of the Treasury, War, Navy, and the Postmaster General, to cause the several reports from their respective departments to be prepared as early as practicable after the close of the fiscal year, and communicate the same to the Clerk of the House of Representatives, who, in conjunction with the Secretary of the Senate, shall arrange the same for publication, so that the number of copies printed by the rules of the two Houses may be ready for delivery at the commencement of each regular session. This resolution, we think, passed the House; but, as no action was taken upon it in the Senate, the measure was lost. We earnestly hope that the new Congress, which meets in December, will take up the subject at an early day, and adopt the plan, so far, at least, as relates to the Annual Report of the Register of the Treasury on Commerce and Navigation. The custom-house returns of the different collection districts can all be made to the Treasury Department in one or two months after the expiration of the fiscal year, (June,) which would give the Register of the Treasury and the printer time to prepare and print the report, so that it could be laid before the members of Congress at the opening of the session. Five months, the interval between the close of the fiscal year and the meeting of Congress, is ample time to accomplish so desirable an object. There can be no objection to this plan, as no alteration or amendment is ever made, or can be, in the reports by any action of Congress, and no variation need be made in the number printed annually.

We now proceed, in accordance with our usual custom, to exhibit, in a condensed

all and comprehensive statement of the Commerce and Navigation of the United States for the year ending June 30th, 1848, as furnished by the official reports, and transmitted to us by the Hon. GEORGE P. MARSH, M. C., of Vermont.

DOMESTIC EXPORTS OF THE UNITED STATES FOR 1848.

STATEMENT OF THE VALUE OF THE EXPORTS OF THE GROWTH, PRODUCE, AND MANUFACTURES OF THE UNITED STATES DURING THE YEAR COMMENCING JULY 1, 1847, AND ENDING JUNE 30, 1848.

THE SEA.		All other agricultural products—	
fish, or cod fisheries.	\$609,482	Flaxseed.....	\$1,584
d fish, or river fish—		Hops.....	17,671
herring, shad, salmon,		Brown sugar.....	8,891
karel).....	109,815	Indigo.....	1,100
and other fish oil..	552,888		\$29,246
aceti oil.....	208,882	MANUFACTURES.	
bone.....	314,107	Soap and tallow candles....	670,223
aceti candles.....	186,839	Leather, boots, and shoes....	194,095
		Household furniture.....	297,358
THE FOREST.		Coaches and other carriages..	89,963
d furs.....	\$1,980,968	Hats.....	55,493
.....	607,780	Saddlery.....	27,485
.....	182,647	Wax.....	184,577
of wood—		Spirits from grain.....	90,957
shingles, b'rds, hewn		Beer, ale, porter, and cider...	78,071
per.....	2,429,863	Snuff and tobacco.....	568,485
lumber.....	288,438	Linseed oil and spirits of tur-	
and spars.....	129,760	pentine.....	331,404
ark and other dye..	184,126	Cordage.....	29,911
manufactures of wood.	2,042,695	Iron—pig, bar, and nails....	154,086
stores, tar, pitch, rosin		“ castings.....	83,188
turpentine.....	752,303	“ all manufactures of...	1,022,408
pot and pearl.....	466,477	Spirits from molasses.....	269,467
	\$7,059,084	Sugar refined.....	258,900
AGRICULTURE.		Chocolate.....	2,207
of animals—		Gunpowder.....	125,363
tallow, hides, horned		Copper and brass.....	61,468
le.....	1,905,341	Medicinal drugs.....	210,581
and cheese.....	1,361,668		\$4,750,440
(pickled,) bacon, lard,		Cotton piece goods—	
hogs.....	9,003,272	Printed and colored.....	351,169
s and mules.....	190,295	White.....	4,866,559
.....	20,823	Nankeen.....	2,865
.....	57,497	Twist, yarn, and thread...	170,683
le food—	\$12,538,896	All other manufactures of.	827,479
k.....	2,669,175	Flax and hemp—	
.....	18,194,109	Cloth and thread.....	495
corn.....	3,837,483	Bags and all manufactures of	6,218
meal.....	1,807,601	Wearing apparel.....	574,834
meal.....	174,566	Combs and buttons.....	16,461
ats, and other small		Brushes.....	2,160
n and pulse.....	376,572	Billiard tables and apparatus.	12
t or ship bread.....	619,096	Umbrellas and parasols....	2,916
es.....	86,277	Leather and morocco skins, not	
s.....	88,944	sold per pound.....	16,483
.....	2,331,824	Fire engines and apparatus..	7,686
	\$25,185,647	Printing presses and type...	30,403
.....	7,551,122	Musical instruments.....	58,508
.....	61,998,294	Books and maps.....	75,193
.....	27,557	Paper and stationery.....	78,207
		Paints and varnish.....	50,739

Vinegar.....	\$13,920	Salt.....	\$73,354
Earthen and stoneware.....	8,512		
Manufactures of glass.....	76,007		\$9,586,624
" tin.....	12,353	Coal.....	47,112
" pewter & lead.....	7,789	Lead.....	84,278
" marble & stone.....	22,466	Ice.....	75,547
" gold and silver & gold leaf.....	6,241	Articles not enumerated—	
Gold and silver coin.....	2,700,412	Manufactured.....	1,137,826
Artificial flowers and jewelry.....	11,217	Other articles.....	851,383
Molasses.....	5,563		\$1,989,211
Trunks.....	6,126		
Brick and lime.....	24,174	Grand total.....	\$132,904,121

TOTAL VALUE OF DOMESTIC MERCHANDISE EXPORTED TO EACH FOREIGN COUNTRY, DISTINGUISHING THE AMOUNTS SHIPPED IN AMERICAN AND FOREIGN VESSELS, IN 1847-8.

Whither exported.	In American vessels.	In Foreign vessels.	To each country.	To dominions of each power.
Russia.....	\$998,962	\$48,620	\$1,047,582	\$1,047,582
Prussia.....	.....	145,074	145,074	145,074
Sweden and Norway.....	150,903	475,069	625,972	701,468
Swedish West Indies.....	71,052	4,444	75,496	
Denmark.....	3,889	160,772	164,551	1,041,630
Danish West Indies.....	783,196	93,773	876,969	
Hanse Towns.....	604,045	3,252,631	3,856,676	3,856,676
Holland.....	740,363	855,087	1,595,450	
Dutch East Indies.....	116,767	17,138	133,905	2,161,522
Dutch West Indies.....	293,326	23,340	316,666	
Dutch Guiana.....	115,501	.....	115,501	
Belgium.....	1,589,899	399,865	1,989,764	1,989,764
England.....	42,784,681	20,143,343	62,928,024	
Scotland.....	1,309,457	1,145,969	2,455,426	
Ireland.....	811,192	1,568,099	2,379,291	
Gibraltar.....	282,865	28,035	310,400	
Malta.....	33,128	.....	33,128	
British East Indies.....	510,284	.....	510,284	80,206,148
Cape of Good Hope.....	100,338	.....	100,338	
Honduras.....	234,857	14,791	249,648	
British Guiana.....	584,204	60,910	595,114	
British West Indies.....	3,573,012	771,524	4,344,536	
British American colonies.....	2,695,296	3,704,663	6,399,959	
France on the Atlantic.....	12,754,788	1,405,010	14,159,798	
France on the Mediterranean....	1,151,227	63,860	1,215,087	
French West Indies.....	426,471	42,882	469,353	15,946,890
French Guiana.....	48,737	.....	48,737	
Miquelon & oth. French fisheries	38,079	19,787	57,866	
French African ports.....	.....	839	839	
Spain on the Atlantic.....	417,734	180,063	597,797	
Spain on the Mediterranean....	354,376	1,387,098	1,741,474	
Teneriffe and other Canaries....	7,802	2,119	9,921	
Manilla and Philippine Islands.	36,949	.....	36,949	9,620,243
Cuba.....	6,341,147	91,233	6,432,380	
Other Spanish West Indies.....	777,551	24,171	801,722	
Portugal.....	54,603	57,657	112,260	
Madeira.....	84,071	26,771	110,842	328,463
Fayal and other Azores.....	3,660	.....	3,660	
Cape de Verdes.....	101,723	.....	101,723	
Italian ports not specified.....	959,136	141,977	1,101,113	1,101,113
Sicily.....	12,131	5,623	17,754	17,754
Sardinia.....	150,708	24,875	175,583	175,583
Tuscany.....	5,197	.....	5,197	5,197
Trieste, & other Austrian ports on the Adriatic.....	1,370,013	331,482	1,701,495	1,701,495
Turkey, Levant, &c.....	114,330		114,330	114,330

Commercial Statistics.

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LIST OF DOMESTIC MERCHANDISE EXPORTED TO EACH FOREIGN COUNTRY—CONTINUED.

Whither exported.	In American vessels.	In Foreign vessels.	To each country.	To dominions of each power.
.....	\$871,899	\$65,687	\$937,586	\$937,586
.....	1,997,913	97,572	2,095,485	2,095,485
Republic of America..	29,995	4,945	34,940	34,940
shada	4,234	74,931	79,165	79,165
la	373,327	26,903	400,230	400,230
.....	2,924,728	168,008	3,092,736	3,092,736
Republic.....	272,994	66,865	339,859	339,859
Republic.....	176,614	32,089	208,703	208,703
.....	1,703,625	.....	1,703,625	1,703,625
.....	2,063,625	.....	2,063,625	2,063,625
.....	113,503	11,116	124,618	124,618
ies generally.....	129,741	3,220	132,961	132,961
merica generally.....	86,385	.....	86,385	86,385
erally.....	266,452	.....	266,452	266,452
erally.....	681,415	89,974	771,389	771,389
as and Pacific.....	305,118	.....	305,118	305,118

..... \$95,544,217 \$37,359,904 \$132,904,121 \$132,904,121

FOREIGN MERCHANDISE EXPORTED FROM UNITED STATES.

FOREIGN MERCHANDISE EXPORTED FROM THE UNITED STATES TO EACH FOREIGN COUNTRY DURING THE YEAR ENDING JUNE 30, 1946.

Whither exported.	Free of duty.	Paying duties ad valorem.	Total value.	To dominions of each power.
.....	\$6,283	\$102,145	\$108,428	\$108,428
.....	.....	15,385	15,385	15,385
und Norway.....	852	31,992	32,844	32,844
West Indies.....	40	760	800	800
.....	7,478	9,774	17,252	17,252
West Indies.....	38,417	38,846	76,763	76,763
wana.....	158,107	307,002	465,109	465,109
.....	32,991	238,522	271,513	271,513
West Indies.....	92,384	15,620	107,964	107,964
West Indies.....	9,504	12,643	22,147	22,147
iana.....	.....	1,517	1,517	1,517
.....	101,441	98,736	200,177	200,177
.....	8,239,857	684,434	8,924,291	8,924,291
.....	.....	38,419	38,419	38,419
.....	.....	1,303	1,303	1,303
.....	29,239	32,306	61,545	61,545
.....	2,506	13,449	15,955	15,955
West Indies.....	56,298	100,417	156,715	156,715
Good Hope.....	15,889	4,350	19,939	19,939
onduras.....	4,624	39,557	44,181	44,181
iana.....	249	1,126	1,365	1,365
West Indies.....	12,918	27,429	40,347	40,347
merican colonies.....	961,900	1,020,796	1,982,696	1,982,696
the Atlantic.....	3,804,426	473,733	4,278,159	4,278,159
the Mediterranean.....	107,857	58,409	166,266	166,266
West Indies.....	7,123	12,948	20,071	20,071
iana.....	.....	1,684	1,684	1,684
the Mediterranean.....	6,875	.....	6,875	6,875
and other Canaries.....	970	259	1,229	1,229
nd Philippine Islands.....	12,696	847	13,543	13,543
.....	128,836	335,497	464,333	464,333
inish West Indies.....	.....	37,012	37,012	37,012
.....	.....	3,984	3,984	3,984
.....	894	6,513	7,407	7,407
Verds.....	2,542	4,307	6,849	6,849
.....	112,951	46,537	159,488	159,488
.....	.....	9,075	9,075	9,075
.....	7,864	11,025	18,889	18,889

VALUE OF FOREIGN MERCHANDISE EXPORTED FROM THE UNITED STATES—CONTINUED.

Whither exported.	Free of duty.	Paying duties ad valorem.	Total value.	To dominions of each power.
Trieste, &c.....	\$39,096	\$68,631	\$107,727	\$107,727
Turkey, Levant, &c.....	79,355	30,966	110,321	110,321
Hayti.....	16,624	139,605	156,229	156,229
Mexico.....	34,068	1,924,899	1,958,967	1,958,967
Central America.....	.....	15,438	15,438	15,438
New Grenada.....	19,907	25,531	45,438	45,438
Venezuela.....	44,286	18,302	62,588	62,588
Brazil.....	195,325	84,373	279,698	279,698
Cisplatine Republic.....	21,225	22,644	43,869	43,869
Argentine Republic.....	14,165	11,060	25,225	25,225
Chili.....	9,588	211,298	220,886	220,886
Peru.....	.....	16,731	16,731	16,731
China.....	72,859	54,029	126,888	126,888
West Indies generally.....	.....	1,337	1,337	1,337
Asia generally.....	20,460	7,819	28,279	28,279
Africa generally.....	18,494	42,909	61,403	61,403
South Seas and Pacific Ocean..	3,408	64,075	67,483	47,483
Total.....	\$14,551,511	\$6,576,499	\$21,128,010	\$21,128,010
Entitled to drawback.....	.....	2,947,151	2,947,151	.....
Not entitled to drawback.....	14,551,511	769,407	15,310,918	.....
From warehouse.....	.....	2,869,941	2,869,941	.....

The total value of foreign merchandise exported, as above, from the United States during the year amounted to \$21,128,010, of which \$14,113,714 was shipped in American vessels, and \$7,014,296 in foreign vessels.

IMPORTS INTO THE UNITED STATES FROM ALL NATIONS.

STATEMENT OF GOODS, WARES, AND MERCHANDISE IMPORTED INTO THE UNITED STATES FROM FOREIGN COUNTRIES DURING THE YEAR ENDING JUNE 30, 1848.

Whence imported.	Free of duty.	Paying duties ad valorem.	Total.	From dominions of each power.
Russia.....	\$19,394	\$1,299,690	\$1,319,084	\$1,319,084
Prussia.....		22,817	22,817	22,817
Sweden and Norway.....	1,513	749,304	750,817	764,603
Swedish West Indies.....	9,627	4,158	13,785	
Denmark.....	60	19,557	19,617	
Danish West Indies.....	144,244	391,494	535,738	556,355
Hanse Towns.....	31,524	6,261,756	6,293,280	6,293,280
Holland.....	213,222	1,204,686	1,417,908	2,172,166
Dutch West Indies.....	106,825	346,790	453,615	
Dutch East Indies.....	156,818	92,528	249,346	
Dutch Guiana.....	.....	51,297	51,297	
Belgium.....	11,799	1,313,262	1,325,061	1,325,061
England.....	3,147,298	56,616,204	59,763,502	69,011,065
Scotland.....	20,900	1,645,794	1,666,694	
Ireland.....	126,082	289,891	415,923	
Gibraltar.....	.....	4,445	4,445	
Malta.....	15	369	384	
British East Indies.....	1,389	2,068,243	2,069,632	
Cape of Good Hope.....	529	59,902	60,431	
British Honduras.....	105,802	79,882	185,684	
British Guiana.....	12,577	11,677	24,254	
British West Indies.....	464,540	694,023	1,158,563	
British American colonies.....	1,228,223	2,418,244	3,646,467	28,287,731
Ionian Islands.....	.....	15,106	15,106	
France on the Atlantic.....	840,618	26,719,101	27,059,714	
France on the Mediterranean... ..	11,091	1,025,226	1,036,317	
French Guiana.....	29,741	34,247	63,988	
Miquelon and French fisheries..		733	733	
French West Indies.....	107,576	19,663	127,239	

Commercial Statistics.

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OF GOODS, WARES, AND MERCHANDISE IMPORTED INTO UNITED STATES—CONTINUED.

Whence imported.	Paying duties		Total.	From dominions of each power.
	Free of duty.	ad valorem.		
the Atlantic.....	\$55,429	\$221,876	\$277,105	17,388,307
the Mediterranean....	34,345	885,001	919,346	
and other Canaries....	.....	85,061	35,061	
nd Philippine Islands..	10,882	1,186,645	1,197,027	
.....	1,004,446	11,849,026	12,853,472	235,877
ish West Indies....	56,949	2,049,347	2,106,296	
.....	8,944	210,838	214,782	
.....	.....	9,432	9,432	
Other Azores.....	784	10,654	11,438	1,616,100
Verda.....	.....	225	225	
.....	58,712	1,557,388	1,616,100	
.....	5,001	613,028	618,029	
d Adriatic ports....	2,537	383,276	385,813	385,813
nd Levant ports.....	590	405,438	406,028	406,028
.....	1,074,594	292,580	1,367,174	1,367,174
.....	865,223	716,014	1,581,247	1,581,247
merica.....	.....	18,272	18,272	18,272
ada.....	99,142	114,154	213,296	213,296
.....	636,709	588,902	1,225,611	1,225,621
.....	5,998,162	1,994,486	7,992,648	7,992,648
Republic.....	26,192	496,872	523,064	523,064
Republic.....	2,886	1,023,261	1,026,097	1,026,097
.....	65,834	1,244,617	1,310,451	1,310,451
.....	76,660	241,099	317,759	317,750
.....	6,225,914	1,857,582	8,083,496	8,083,496
es generally.....	3,358	7,236	10,594	10,594
rally.....	15,615	239,885	255,400	255,400
erally.....	100,383	555,202	655,585	655,585
s and Pacific Ocean..	1,800	8,160	9,960	9,960
Islands.....	.....	6,508	6,508	6,508
sea.....	.....	371	371	371

..... \$22,716,603 132,282,325 \$154,998,928 \$154,998,928

nd value of imports from all countries during the year, as above, amounted to \$28, of which \$128,647,232 was received in American vessels, and \$26,351,696 vessels.

PORTS TO, AND IMPORTS OF, UNITED STATES FROM ALL NATIONS.

VIEW OF THE EXPORTS TO, AND IMPORTS FROM, EACH FOREIGN COUNTRY DURING THE YEAR ENDING JUNE 30, 1848.

Countries.	VALUE OF EXPORTS.		Total.	VALUE OF IMPORTS.
	Domestic produce.	Foreign produce.		
.....	\$1,047,582	\$108,428	\$1,156,010	\$1,819,084
.....	145,074	15,285	160,459	22,817
nd Norway.....	625,972	32,844	658,816	750,817
West Indies.....	75,496	800	76,296	12,785
.....	164,661	17,252	181,913	19,617
est India.....	876,969	76,874	953,843	536,738
.....	1,595,450	271,513	1,866,963	1,417,908
t Indies.....	133,905	107,954	241,859	249,246
st Indies.....	316,666	22,147	338,813	453,615
na.....	116,501	1,517	117,018	51,997
ans.....	3,856,676	465,109	4,321,785	6,292,280
.....	1,989,764	200,171	2,189,935	1,325,061
.....	62,928,024	8,924,291	71,852,315	59,763,502
.....	2,455,426	38,418	2,493,845	1,666,694
.....	2,379,391	1,303	2,380,694	415,923
.....	310,400	61,545	371,945	4,445
.....	33,128	15,955	49,083	384

STATISTICAL VIEW OF THE EXPORTS AND IMPORTS OF EACH FOREIGN COUNTRY—CONTINUED.

Countries.	VALUE OF EXPORTS.			VALUE OF IMPORTS.
	Domestic produce.	Foreign produce.	Total.	
British East Indies.....	\$510,284	\$156,715	\$666,999	\$2,069,633
British West Indies.....	4,344,536	40,347	4,384,883	1,158,543
British Guiana.....	695,114	1,365	596,479	24,254
British Honduras.....	249,648	44,181	293,829	185,684
Cape of Good Hope.....	100,388	19,939	120,277	60,431
Mauritius.....	.....	.....	.....	.....
British American colonies.....	6,399,959	1,982,696	8,382,655	3,646,447
France on the Atlantic.....	14,159,798	4,278,159	18,437,957	27,059,714
France on the Mediterranean....	1,215,087	166,266	1,381,353	1,086,317
French West Indies.....	469,353	20,071	489,924	127,039
French Guiana.....	48,787	1,684	50,421	63,968
French fisheries.....	52,866	.....	52,866	733
French African ports.....	839	.....	839	.....
Spain on the Atlantic.....	597,797	.....	597,797	277,106
Spain on the Mediterranean....	1,741,474	6,875	1,748,349	919,346
Teneriffe, &c.....	9,921	1,229	11,150	35,041
Manilla.....	36,949	13,543	50,492	1,197,097
Cuba.....	6,432,380	464,333	6,896,713	12,853,471
Porto Rico.....	801,722	37,012	838,734	2,106,396
Portugal.....	112,260	2,984	115,244	214,783
Madeira.....	110,843	7,407	118,249	9,433
Fayal and the Azores.....	3,660	.....	3,660	11,439
Cape de Verd Islands.....	101,723	6,849	108,572	335
Sardinia.....	175,583	18,389	193,972	.....
Tuscany.....	5,197	.....	5,197	.....
States of the Church.....	.....	.....	.....	.....
Sicily.....	17,754	9,075	26,829	618,039
Italian States generally.....	1,101,113	159,488	1,260,601	1,616,106
Ionian Republic.....	.....	.....	.....	15,166
Trieste, &c.....	1,701,495	107,727	1,809,222	365,333
Turkey.....	114,880	110,321	225,151	406,028
Mexico.....	2,095,495	1,962,951	4,058,436	1,581,247
Central America.....	34,940	15,438	50,378	18,272
New Grenada.....	79,165	45,438	124,603	213,296
Venezuela.....	400,280	62,798	468,028	1,725,611
Brazil.....	3,092,736	279,698	3,372,434	7,992,949
Cisplatine Republic.....	339,859	43,869	383,728	523,064
Argentine Republic.....	208,703	25,225	233,928	1,026,097
Chili.....	1,708,635	220,886	1,924,511	1,310,461
Peru.....	124,618	16,781	141,349	317,759
Bolivia.....	.....	.....	.....	.....
China.....	3,063,625	126,388	2,190,013	8,083,496
Haiti.....	937,586	156,229	1,093,815	1,367,174
Europe generally.....	.....	.....	.....	.....
Asia generally.....	266,452	28,279	294,731	255,400
Africa generally.....	771,369	61,403	832,791	655,565
West Indies generally.....	132,961	1,337	134,298	10,594
South America generally.....	86,885	.....	86,885	.....
Liberia.....	.....	.....	.....	.....
Pacific Ocean.....	305,118	67,483	372,601	3,966
Indian Ocean.....	.....	.....	.....	.....
Atlantic Ocean.....	.....	.....	.....	.....
Sandwich Islands.....	.....	.....	.....	6,508
North-west Coast.....	.....	.....	.....	.....
Uncertain places.....	.....	.....	.....	371
Total.....	132,904,121	\$21,132,315	\$154,036,436	\$154,993,923

NAVIGATION OF THE UNITED STATES WITH ALL NATIONS.

L VIEW OF TONNAGE OF AMERICAN AND FOREIGN VESSELS ARRIVING FROM, AND DEPARTING TO, EACH FOREIGN COUNTRY DURING THE YEAR ENDING JUNE 30, 1848.

Countries.	AMERICAN TONNAGE.		FOREIGN TONNAGE.	
	Entered United States.	Cleared United States.	Entered United States.	Cleared U. States.
.....	10,857	9,588	.....	393
.....	216	.....	254	2,750
nd Norway.....	1,769	2,138	13,261	10,546
West India.....	165	2,250	.....	79
.....	379	763	1,115	2,675
est India.....	19,781	25,579	1,890	4,065
.....	12,971	12,347	18,628	21,255
st India.....	3,710	4,575	.....	6,969
est India.....	28,456	7,894	1,401	539
iana.....	4,683	5,958	.....	317
wna.....	29,036	15,737	83,521	59,109
.....	20,256	19,870	11,431	6,367
.....	416,772	476,548	284,525	258,210
.....	9,728	14,195	29,419	17,096
.....	33,808	17,410	61,341	34,779
.....	.....	9,576	589	772
.....	260	1,312	.....	.....
st India.....	15,003	15,354	.....	642
est India.....	80,651	114,818	34,960	24,416
iana.....	3,396	16,141	2,608	1,225
nduras.....	2,909	5,486	1,062	1,838
ood Hope.....	697	1,670	.....	.....
.....	.....	346	.....	.....
merican colonies.....	867,240	859,791	756,194	881,371
the Atlantic.....	146,609	116,062	22,614	26,459
the Mediterranean...	9,717	16,484	2,223	938
est India.....	9,848	21,148	8,076	2,170
iana.....	1,626	1,717	.....	.....
heries.....	386	1,241	.....	644
frican ports.....	.....	.....	.....	.....
the Atlantic.....	15,877	12,926	844	2,309
the Mediterranean...	15,467	8,193	9,155	27,313
&c.....	1,428	839	390	115
.....	10,905	3,318	460	.....
.....	284,304	281,251	23,487	13,435
o.....	45,438	35,241	513	1,250
.....	3,640	5,342	2,088	5,416
.....	802	4,524	.....	1,144
l the Azores.....	1,000	315	.....	.....
Verd Islands.....	651	4,084	.....	2,038
.....	399	9,162	2,235	1,983
.....	5,323	2,558	1,636	.....
the Church.....	.....	373	.....	.....
.....	26,317	924	3,217	399
ates generally.....	.....	.....	.....	.....
public.....	174	.....	.....	.....
.....	4,136	16,329	.....	4,693
.....	3,950	1,966	441	230
.....	21,795	62,083	2,916	4,526
merica.....	3,831	308	156	700
nada.....	2,577	733	777	1,567
.....	12,347	7,361	1,018	1,505
.....	59,537	57,206	11,415	6,034
Republic.....	10,495	11,949	3,070	4,413
Republic.....	695	536	714	1,450
.....	5,422	10,465	591	346

STATISTICAL VIEW OF THE TONNAGE OF AMERICAN AND FOREIGN VESSELS—CONTINUED.

Countries.	AMERICAN TONNAGE.		FOREIGN TONNAGE.	
	Entered United States.	Cleared United States.	Entered United States.	Cleared U. States.
Peru.....	998	2,732	1,085	1,419
Bolivia.....	209	209	170	169
China.....	23,719	17,150	664	.....
Haiti.....	27,692	23,340	781	2,694
Europe generally.....	.....	.....	.....	.....
Asia generally.....	1,513	580	.....	.....
Africa generally.....	10,424	11,208	406	2,079
West Indies generally.....	.....	5,225	.....	337
South America generally.....	.....	475	.....	.....
Liberia.....	.....	914	.....	.....
Pacific Ocean.....	55,695	59,042	.....	.....
Indian Ocean.....	557	1,145	.....	.....
Atlantic Ocean.....	3,380	2,114	.....	.....
Sandwich Islands.....	1,428	470	.....	.....
North-west Coast.....	701	2,342	.....	.....
Uncertain places.....	238	.....	.....	.....
Total.....	2,393,482	2,461,280	1,405,191	1,404,150

TONNAGE OF EACH COLLECTION DISTRICT OF THE UNITED STATES.

STATEMENT EXHIBITING A CONDENSED VIEW OF THE TONNAGE OF THE SEVERAL DISTRICTS OF THE UNITED STATES ON THE 30TH OF JUNE, 1848, IN TONS AND 95THS.

Districts.	Registered.	Enrolled and licensed.	Total of each district.
Passamaquoddy, Maine.....	7,754 71	10,801 69	18,556 40
Machias, ".....	2,065 28	18,000 18	20,065 46
Frenchman's Bay, ".....	1,848 73	25,597 09	27,445 83
Penobscot, ".....	7,922 93	30,047 36	37,970 30
Belfast, ".....	4,802 12	28,325 50	37,227 62
Bangor, ".....	12,206 16	12,171 38	24,377 54
Waldoboro', ".....	28,513 79	57,469 70	85,983 49
Wiscasset, ".....	6,086 65	14,521 88	20,611 53
Bath, ".....	56,866 12	26,546 07	83,412 19
Portland, ".....	55,322 26	27,039 67	82,361 93
Saco, ".....	2,235 26	2,270 60	4,506 86
Kennebunk, ".....	6,713 94	2,042 67	8,756 61
York, ".....	.....	1,053 22	1,053 22
Portsmouth, New Hampshire.....	15,149 27	8,806 42	23,955 69
Burlington, Vermont.....	.....	3,629 82	3,629 82
Newburyport, Massachusetts.....	21,314 45	7,658 55	28,973 00
Ipswich, ".....	.....	764 35	764 35
Gloucester, ".....	2,357 66	18,821 89	21,182 60
Salem, ".....	17,987 56	8,277 31	26,264 87
Beverly, ".....	.....	4,222 35	4,222 35
Marblehead, ".....	1,363 38	5,687 43	7,550 81
Boston, ".....	232,770 48	52,639 79	285,410 27
Plymouth, ".....	3,771 08	7,602 48	11,373 56
Fall River, ".....	2,605 37	10,235 63	12,841 00
New Bedford, ".....	113,617 93	9,700 34	123,318 27
Barnstable, ".....	4,102 49	60,206 88	64,309 37
Edgartown, ".....	4,505 28	1,291 06	5,796 34
Nantucket, ".....	27,398 54	3,178 92	30,577 46
Providence, Rhode Island.....	10,710 69	8,493 57	19,204 26
Bristol, ".....	12,715 75	2,356 67	15,072 42
Newport, ".....	5,265 48	4,330 37	9,595 85
Middletown, Connecticut.....	516 06	10,524 26	11,040 32
New London, ".....	27,801 66	13,527 14	41,328 80
Stonington, ".....	12,921 23	6,344 66	19,265 89
New Haven, ".....	5,360 32	13,821 64	19,182 01
Fairfield, ".....	1,227 45	19,917 21	21,144 66

STATEMENT OF THE TONNAGE OF THE SEVERAL DISTRICTS OF THE UNITED STATES—CONTINUED

Districts.	Registered.	Enrolled and licensed.	Total of each district.
Champlain, New York.....	.....	4,745 74	4,745 74
Sackett's Harbor, ".....	.....	8,242 09	8,242 09
Oswego, ".....	.....	21,079 17	21,079 17
Niagara, ".....	.....	621 67	621 67
Genesee, ".....	.....	1,272 18	1,272 18
Oswegatchie, ".....	.....	2,586 37	2,586 37
Buffalo, ".....	.....	42,623 73	42,623 73
Eag Harbor, ".....	21,750 63	7,579 63	29,330 31
New York, ".....	338,804 40	396,272 90	735,077 36
Cape Vincent, ".....	.....	2,209 48	2,209 48
Perth Amboy, New Jersey.....	181 83	23,434 38	23,616 21
Bridgetown, ".....	212 30	13,649 16	13,861 46
Burlington, ".....	.....	7,012 46	7,012 46
Camden, ".....	.....	8,499 63	8,499 63
Newark, ".....	279 70	8,947 92	9,227 67
Little Egg Harbor ".....	.....	5,977 33	5,977 33
Great Egg Harbor ".....	.....	10,259 88	10,259 88
Philadelphia, Pennsylvania.....	48,850 40	126,371 13	175,221 53
Presque Isle, ".....	.....	5,360 35	5,360 35
Pittsburg, ".....	.....	36,970 21	30,970 21
Wilmington, Delaware.....	1,352 10	8,738 15	10,090 25
New Castle, ".....	.....	7,361 85	7,361 85
Baltimore, Maryland.....	72,367 06	50,548 15	122,915 21
Oxford, ".....	.....	10,857 92	10,857 92
Vienna, ".....	.....	11,080 06	11,080 06
Snow Hill, ".....	.....	7,028 66	7,028 66
St. Mary's, ".....	.....	2,061 64	2,061 64
Town Creek, ".....	.....	2,255 48	2,255 48
Annapolis, ".....	.....	2,293 07	2,293 07
Georgetown, District of Columbia....	1,940 87	9,882 80	11,823 72
Alexandria, Virginia.....	4,888 75	5,415 27	10,304 07
Norfolk, ".....	11,397 62	12,606 16	24,003 78
Petersburg, ".....	948 65	1,309 79	2,258 49
Richmond, ".....	3,685 45	3,531 82	7,217 32
Yorktown, ".....	.....	3,237 37	3,237 37
East River, ".....	.....	4,201 53	4,201 53
Tappahannock, ".....	273 38	5,284 23	5,557 61
Accomac, C. H., ".....	.....	4,023 39	4,023 39
Yeocomico, ".....	.....	3,427 68	3,427 68
Cherrystone, ".....	.....	1,291 47	1,291 47
Wheeling, ".....	.....	2,660 76	2,660 76
Wilmington, North Carolina.....	10,455 08	5,791 65	16,246 73
Newbern, ".....	1,165 00	3,442 20	4,607 20
Washington, ".....	1,494 50	4,091 10	5,585 60
Edenton, ".....	460 93	722 19	1,183 13
Camden, ".....	1,024 58	8,004 33	9,028 91
Beaufort, ".....	.....	1,550 59	1,550 59
Plymouth, ".....	1,334 83	1,068 86	2,403 64
Ocracoke, ".....	.....	798 82	798 82
Charleston, South Carolina.....	11,797 33	12,440 13	24,237 46
Beaufort, ".....	.....	33 57	33 57
Georgetown, ".....	3,195 04	1,193 33	4,388 37
Savannah, Georgia.....	8,194 68	10,160 92	18,355 65
Sunbury, ".....	.....	.....	.....
Brunswick, ".....	.....	215 56	215 56
Hardwick, ".....	.....	.....	.....
St. Mary's, ".....	1,368 08	850 61	2,218 69
Pensacola, Florida.....	3,056 08	2,762 20	5,819 28
St. Augustine, ".....	.....	67 01	67 01
Apalachicola, ".....	692 94	2,715 08	3,408 07

STATEMENT OF THE TONNAGE OF THE SEVERAL DISTRICTS OF THE UNITED STATES—CONTINUED.

Districts.	Registered.	Enrolled and licensed.	Total of each district.
St. Mark's, Florida.....	.....	598 26	598 26
St. John's, ".....	.....	180 63	180 63
Key West, ".....	3,293 68	1,797 57	5,091 25
Mobile, Alabama.....	6,167 42	15,942 63	22,110 10
Pearl River, Mississippi.....	.....	.....	.....
Vicksburg, ".....	.....	568 63	568 63
New Orleans, Louisiana.....	82,405 23	143,275 29	225,680 52
Teche, ".....	.....	1,329 85	1,329 85
Nashville, Tennessee.....	.....	2,445 68	2,445 68
Louisville, Kentucky.....	.....	8,822 39	8,822 39
St. Louis, Missouri.....	.....	36,312 61	36,312 61
Chicago, Illinois.....	.....	10,488 62	10,488 62
Cuyahoga, Ohio.....	.....	30,403 32	30,403 32
Sandusky, ".....	.....	7,160 91	7,160 91
Cincinnati, ".....	.....	21,350 70	21,350 70
Miami, ".....	.....	3,163 44	3,163 44
Detroit, Michigan.....	.....	25,850 20	25,850 20
Michilimackinac, Mich.....	.....	1,400 22	1,400 22
Galveston, Texas.....	446 73	709 34	1,156 12
Saluria, ".....	.....	196 41	196 41
Total.....	1,360,886 85	1,793,155 00	3,154,041 85

TONNAGE OF THE UNITED STATES.

	Tons.
The aggregate amount of tonnage of the United States, on the 30th of June, 1848.....	3,154,041 85
Whereof permanent registered tonnage.....	1,067,976 60
Temporary registered tonnage.....	292,910 25
Total registered tonnage.....	*1,360,886 85
Permanent enrolled licensed tonnage.....	1,891,327 20
Temporary " " ".....	56,304 41
Total enrolled and licensed tonnage.....	1,747,631 61
Licensed tonnage under 20 tons, employed in the coasting trade.....	38,328 67
Licensed tonnage under 20 tons, employed in the cod fishery.....	7,194 62
Total licensed tonnage under 20 tons.....	45,524 29
Total.....	3,154,041 85
Of the enrolled and licensed tonnage there were employed in the coasting trade.....	1,630,988 16
Employed in the mackerel fishery.....	43,558 73
" " cod fishery.....	82,651 82
" " whale fishery.....	432 75
Total, as above.....	1,747,631 61

Of the enrolled and licensed tonnage employed in the coasting trade, amounting, as stated above, to 1,620,988 16 tons, there were employed in steam navigation 411,323 40 tons.

* Of the registered tonnage as above, 1,360,887 85 tons, there was employed in the whale fishery, on the 30th June, 1848, 193,179 90 tons.

EXPORTS OF HAVANA FROM 1837 TO 1848.

We give below a comparative statement of merchandise registered for export from the port of Havana in the twelve years from 1837 to 1848, inclusive:—

Years.	Sugar. Boxes.	Coffee. Arrobas.*	Segars. Milleros.†	Leaf tobacco. lbs.	Molasses. Hds.	Honey. Casks.	Wax. Arrobas.
1837....	221,657	1,409,789	143,705	1,119,185	43,278	1,399	35,414
1838....	344,493	864,490	171,413	1,528,125	56,451	1,173	20,251
1839....	330,624	1,174,996	153,370	1,359,029	51,902	1,526	29,535
1840....	447,578	1,272,822	137,067	1,025,262	47,006	2,118	24,447
1841....	346,890	742,570	159,450	1,452,989	42,909	1,974	23,815
1842...	427,947	1,081,468	130,727	1,018,990	37,459†	2,643	29,351
1843....	461,307†	773,043	152,009	2,138,802	35,711	2,198	37,043†
1844....	534,582	579,248	149,583	1,286,242	35,812†	1,963†	31,759†
1845....	276,595	170,466	119,271	1,633,078	20,075	847†	31,409†
1846....	515,900†	268,946	151,923	3,850,637	26,679†	1,887†	37,487†
1847....	661,766†	346,390	210,027	2,109,159	32,765	1,425†	36,095
1848....	686,082†	132,172	149,667	1,354,722	25,934	1,707	36,923
Total..	5,346,424	8,311,400	1,828,213	19,376,215	455,983	20,857	378,546

STATEMENT OF THE EXPORTS FROM HAVANA TO THE UNITED STATES IN 1847 AND 1848.

	1847.	1848.		1847.	1848.
Sugar.....boxes	173,107	133,147	Wax.....arrobas	1,209	178
Coffee.....arrobas	86,294	44,618	Brandy.....pipes	1	1,503
Molasses.....hds.	29,848	25,752	Tobacco, manufactur'd	45,206	75,087
Honey.....casks	398	499	" leaf.....lbs.	567,811	793,751

EXPORT AND IMPORT TRADE OF MONTREAL.

We are indebted to the editor of the *Montreal Herald* for the following comparative statement of the value of the exports and imports at the port of Montreal, Canada, for the last eight years. We have omitted, for the sake of convenience, the shilling and pence columns, which will, of course, vary the footing up for the eight years a few pounds:—

COMPARATIVE STATEMENT OF THE VALUE OF IMPORTS AT THE PORT OF MONTREAL FROM 1841 TO 1848, INCLUSIVE.

Years.	G. Britain.	British colonies. N. America. W. Indies.	U. States.	For. States.	Total.
1841.....	£1,632,480	£38,615	£10,763	£17,978	£1,699,837
1842.....	1,614,981	32,686	£1,072	558	1,661,868
1843.....	911,828	54,576	1,255	58,509	1,059,921
1844.....	1,803,226	56,578	867	143,219	2,034,315
1845.....	1,990,864	38,876	8,329	100,114	2,153,631
1846.....	1,784,760	37,111	81	90,513	1,893,623
1847.....	1,491,877	49,487	270	126,557	1,695,978
1848.....	1,062,948	29,522	....	107,878	1,217,604

COMPARATIVE STATEMENT OF THE VALUE OF EXPORTS AT THE PORT OF MONTREAL FROM 1841 TO 1848, INCLUSIVE.

Years.	G. Britain.	British colonies. W. Indies. N. America. Elsewhere.	U. States.	For. States.	Total.
1841..	£526,064	£11,782	£35,543	£2,028	£375,400
1842..	565,681	5,137	28,137	....	598,955
1843..	285,876	5,720	27,470	....	319,067
1844..	597,276	3,444	16,746	....	617,916
1845..	571,096	....	21,339	....	592,436
1846..	506,697	....	18,784	10,825	541,100
1847..	616,563	....	32,878	25,864	697,794
1848..	283,104	....	27,474	....	322,061

* Arrobas about 25 lbs. each.

† In thousands.

It will be seen that the value of goods entered at the port of Montreal during the year 1847, was £1,695,978 sterling; and for the past year, 1848, £1,217,601 sterling. The falling off in the value of imports in 1848, was, therefore, £478,374 sterling. The exports in 1847 exceeded those in any previous year. They amounted in value to £697,794 sterling. This year they only reached £322,061 sterling, exhibiting a decrease on the twelve months of £375,732 sterling. This is the smallest export since 1843. It must be remembered, however, that a portion of the apparent decrease arises from the much lower prices of produce in 1848 than in 1847. The difference would probably add nearly 20 per cent to the apparent export, as compared with the preceding twelve months. We are unable to make up a detailed statement of the various articles entered, as there are no accounts kept at the custom-house at Montreal which distinguish between any articles, except they come under the denomination of "Foreign." The following items, however, will afford some information on this point. The import of gin has fallen off to the extent of 9,000 gallons; of rum, 28,250 gallons; and of molasses, 2,280 cwt. There is an increase, on the other hand, in the receipt of wine. Thus, in 1847, 142,703 gallons were entered, and in 1848, 240,565 gallons, showing an increase of 97,862 gallons on the present year. The importation of tea in 1847 was 447,460 pounds, and during the last year it reached 458,560 pounds, showing a trifling increase.

The following is a statement of the importation of brandy for the past three years: 1846.....galls. 74,772 | 1847.....galls. 62,818 | 1848.....galls. 79,901

RAILROAD, CANAL, AND STEAMBOAT STATISTICS.

VOYAGES OF BRITISH AND NORTH AMERICAN STEAMSHIPS.

The following statement of the voyages of the British and North American Royal Mail Steamships in 1848 is derived from the *Halifax Chronicle*:—

During the past year (1848) these unequalled vessels have made 44 voyages each way across the Atlantic, making in all 88, and have carried 8,955 passengers, namely, 1,689 out, and 2,266 home. The average length of passage from Liverpool was 12 days and 2½ hours; the longest was that of the *Britannia*, in March, 18½ days. The shortest passages were as follows:—

	Days.	Hours.
Liverpool to Halifax, the <i>Europa</i> , in October.....	8	18
" Boston, the <i>America</i> , in June.....	10	6
" New York, the <i>Europa</i> , in October.....	10	23
Halifax to Boston, the <i>Niagara</i> , in December.....	1	5
" New York, the <i>America</i> , in April.....	1	20
" Liverpool, the <i>Niagara</i> , in July.....	8	12
Boston to Liverpool, the <i>Niagara</i> , in July.....	10	10
New York to Liverpool, the <i>America</i> , in November.....	11	11
" Halifax, the <i>Europa</i> , in November.....	2	5
Boston to Halifax, the <i>Europa</i> , in August.....	1	6

The *America* has made the best running outwards of the four new boats—her average passage to Halifax having been 10 days 2½ hours; *Europa's*, 10 days 4½ hours; *Niagara's*, 10 days 4½ hours. The *Canada* made but one passage out.

MANSFIELD AND SANDUSKY CITY RAILROAD.

We have received the Second Annual Report of the Officers and Directors of the Mansfield and Sandusky City Railroad Company, from January 1st, 1848, to December 31. The gross earnings of the road for 1848 are nearly equal to those of 1847. In wheat, the road falls short of 1847, 120,427 bushels, and in flour, 43,407, which is attributed to the general short crop of the west. The passage receipts show an excess over the year previous, chiefly if not all from way travel. The company's finances are stated by the officers to be such that its bonded debt may reasonably be increased for the purchase of iron and machinery, if required, \$250,000—and no company in their opinion can offer better security for the same amount. At present, but \$150,000 is wanted for the necessary increase of machinery and cars to stock the Newark exten-

the capital stock authorized by the charter is \$900,000—\$600,000 only of which has been used.

Earnings and expenses of this road for twelve months to December 31, 1848, are: for freight receipts, \$58,265 78; passage receipts, \$24,155 81; for mail, \$1,145 5; total receipts, \$83,576 34. The total expenses of running the road, including interest paid on bonds, &c., has been \$27,355 34, which after deducting interest paid on bonds, &c., leaves the earnings of the road appear to have been in the 12 months, \$43,170 86. The line of the Newark extension, which is to take place in the fall of 1849, extending 116 miles, and will, it is calculated, augment the receipts of the Mansfield triple what they have been the past year, which will amount to \$250,000, proportionably increasing the expenses.

COMMERCE OF THE MORRIS CANAL.

The following table shows the comparative business done on this improvement during four years. It shows a rapid increase during the past year:—

	1845.	1846.	1847.	1848.
Grain.....tons	28,291	47,947	67,068	89,879
.....	512	1,022	478	1,167
Feed.....	692	2,201	1,190	1,620
Meal.....	943	1,219	1,229	2,699
.....	74	126	230	195
Looms.....	1,243	1,686	1,790	1,697
Wool.....	39	.....	5,090	7,377
Wages and bars.....	5,795	11,356	16,949	16,566
.....	5,802	17,078	28,814	46,922
Nails and rivets.....	206	442	807	401
.....	715	1,784	738	2,102
.....	1,616	2,356	3,364	5,450
Beer.....	1,315	1,944	3,424	1,913
Wharf, &c.....	5,004	6,756	6,010	6,605
.....	583	1,804	1,764	2,528
Ice.....	1,510	2,450	1,810	5,480
Bricks and clay.....	2,466	5,127	6,631	4,825
.....	759	1,429	2,122	3,775
Liquor and groceries.....	580	1,279	2,585	2,313
.....	215	994	4,130	1,167
Total.....	58,259	109,505	155,559	204,682

THE RESULTS OF SKILL AND INDUSTRY:

AS ILLUSTRATED IN THE CONSTRUCTION OF CANALS AND RAILROADS.

I have traversed the great Erie Canal from one end to the other; I have floated on the Ohio Canal; and I returned to the sea-shore by the Pittsburgh and Erie canals and railroads. What a magnificent excursion! What mighty exertions of art and labor are here! What a moving of the affections! What an exercise of the imagination! How many beautiful and splendid visions have floated before my mind, which were surpassed by the great realities! Here were deep basins, and noble and long-stretching embankments, which rivaled the neighboring rivers, hundred of miles in length, flowing at man's pleasure, and in the form of his hands. Here were streams crossing streams on beautifully constructed aqueducts. Here were mountains of granite pierced through and through, and opened through the heart of the adamantine barriers for vehicles freighted with life. Here were deep inland oceans mingling their waters with the mighty sweeps from pole to pole, and bearing upon their quiet tides ten thousand and deeply laden arks, myriads of human beings active in the pursuit of business; accumulations of wealth from the deep and tangled recesses of the earth first springing into life under the touch of civilization, from the glittering shores of the polar ice, and from the shores of the Western Ocean; accumulations whose extent defies all calculation. All this, too, is the work of a little animal of the size of a fly, with only two feet and two hands, and of an average of life less than twenty years. His mighty implements, a hoe, a pickaxe, a shovel. Such are the results of intelligent, concentrated, persevering labor.

A COMPLETE STATISTICAL VIEW OF THE MASSACHUSETTS RAILROADS IN 1848.

COMPILED WITH GREAT CARE, FROM THE ANNUAL REPORT MADE TO THE LEGISLATURE, EXPRESSLY FOR THE MERCHANTS' MAGAZINE.

[From the annexed table the Vermont and Worcester and Worcester and Nashua Railroads are excluded; the former not having been opened until February 26, 1849, and the latter until December 18, 1848.]

Name.	Length.	Coal.	Receipts.			Expenses.			Net income, on coal.	Net income, p. c.
			Passengers.	Freight.	Mails, &c.	Total.	Road bed.	Mot'g power.		
1 Worcester*.....	67	\$4,650,393	\$332,986	\$359,078	\$24,325	\$716,384	\$50,520	\$61,513	\$394,173	\$406,904
2 Western.....	155	9,900,154	551,038	745,910	35,120	1,332,068	187,515	113,384	380,958	652,357
3 Norwich & Worcester*..	66	2,187,829	100,271	99,960	17,842	218,073	23,619	25,255	83,089	131,964
4 Connecticut River*....	53	1,386,185	89,638	71,807	4,797	165,342	10,535	17,225	67,899	95,659
5 Pittsfield & N. Adams..	19	447,755	14,759	13,381	279	29,319	6,310	2,560	8,588	17,458
6 Berkshire.....	21	600,000	.....	.....	.....	.....	.....	.....	.....	.....
7 Providence*.....	48	3,031,107	231,263	112,198	10,924	354,375	36,840	26,068	131,493	183,361
8 Taunton*.....	12	306,086	31,563	19,872	1,992	53,457	8,601	11,567	19,800	34,468
9 New Bedford*.....	21	499,966	57,634	29,413	2,150	89,197	9,172	6,090	34,010	59,272
10 Providence & Worcester	44	1,873,996	117,366	73,917	2,541	193,844	11,416	8,543	63,832	83,891
11 Stoughton Branch.....	5	96,111	4,663	4,021	1,397	10,081	1,000	3,000	.....	4,000
12 Lowell*.....	28	2,013,687	201,319	255,147	4,973	461,339	56,047	72,739	189,921	268,707
13 Nashua.....	15	525,063	72,868	92,195	4,125	169,188	16,089	44,915	48,595	109,599
14 Lawrence.....	12	283,249	17,333	3,511	.....	20,744	2,384	1,843	13,713	7,032
15 Boston & Maine*.....	79	3,571,832	332,161	170,186	9,281	511,638	41,394	44,696	178,445	264,535
16 Fitchburg*.....	56	2,945,031	186,682	214,667	5,809	408,338	29,365	34,515	145,639	206,519
17 Eastern*.....	58	3,095,394	378,069	581,149	22,940	479,158	31,600	32,216	176,018	230,334
18 Old Colony*.....	45	2,080,903	146,753	52,457	22,890	222,100	15,167	25,414	93,763	134,343
19 Fall River.....	43	1,145,963	118,391	62,885	3,518	184,344	10,911	15,513	78,467	101,391
20 Cape Cod Branch.....	27	587,116	28,018	7,617	.....	35,635	143	451	19,162	19,766
Total.....	873	\$41,429,240	\$3,011,575	\$2,445,806	\$194,508	\$5,651,384	\$509,886	\$639,116	\$1,959,886	\$2,008,040
										\$2,496,244

* Including branches.

† Let to Western Railroad.

A COMPLETE STATISTICAL VIEW OF THE MASSACHUSETTS RAILROADS IN 1848—CONTINUED.

COMPILED WITH GREAT CARE, FROM THE ANNUAL REPORT MADE TO THE LEGISLATURE, EXPRESSLY FOR THE MERCHANTS' MAGAZINE.

	Number of miles run.		Total		Net		No. of		No. of tons		Weight of pas.		Weight of mar.		Total tons	
	Passenger trains.	Freight trains.	Other trains.	Total.	per m. run.	income per m. run.	passengers carried the car.	merchandise carried the car.	merchandise carried one mile.	passengers carried one mile.	trains, not including freight.	trains, not including freight.	trains, not including freight.	trains, not including freight.	trains, not including freight.	trains, not including freight.
1	266,989	192,487	16,821	466,297	\$1 58	\$0 87	\$0 66	807,143	15,640,022	273,146	10,159,309	13,082,249	20,086,265	83,413,680		
2	245,153	454,272	107,068	806,492	1 66	0 81	0 85	406,614	19,871,774	265,642	24,656,129	18,393,790	47,932,000	66,461,293		
3	182,221	72,758	7,422	212,401	1 03	0 62	0 41	151,100	3,960,420	46,740	2,215,070	6,338,169	6,949,497	13,283,406		
4	98,278	43,332	9,482	147,092	1 12	0 65	0 47	299,865	3,096,163	101,314	1,838,240	2,476,180	2,007,360	4,664,804		
5	11,569	13,697	138	25,404	1 11	0 69	0 42	33,372	436,167	14,029	231,975	804,266	643,415	1,461,709		
6	13,314	20,870	.....	33,684	.....	.....	.....	42,474	.....	.....	.....	.....	.....	.....		
7	182,430	56,160	4,500	243,090	1 46	0 75	0 71	569,127	8,783,106	87,611	1,706,426	10,500,000	8,200,000	18,787,611		
8	20,634	6,908	266	28,008	1 91	1 23	0 68	101,462	1,101,840	85,521	367,345	816,212	895,465	1,747,196		
9	44,253	19,608	488	64,348	1 38	0 76	0 62	94,545	1,404,984	20,390	359,133	1,747,840	882,900	2,651,080		
10	75,626	28,339	18,926	125,891	1 54	0 67	0 87	305,484	4,310,976	47,288	946,877	5,508,830	2,832,900	8,385,008		
11	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....		
12	174,660	73,882	19,642	268,184	1 73	1 01	0 73	625,764	10,496,226	304,270	7,809,126	9,012,456	8,752,399	18,069,195		
13	27,006	22,750	3,654	53,410	3 17	2 05	1 12	254,966	3,310,460	186,401	2,685,528	1,051,680	1,008,500	2,646,781		
14	16,850	1,050	1,162	18,062	1 15	0 76	0 39	69,660	929,866	3,771	45,887	681,000	107,512	792,163		
15	264,440	63,913	27,400	355,753	1 44	0 75	0 69	1,057,569	16,991,068	116,694	3,752,445	11,470,511	6,273,945	17,361,160		
16	241,115	120,346	16,059	377,520	1 08	0 55	0 53	745,925	11,425,863	266,868	6,743,039	10,845,750	8,868,920	19,981,588		
17	224,640	33,696	13,640	271,976	1 16	0 86	0 91	1,021,169	12,656,687	46,261	1,230,841	11,235,000	3,082,640	14,399,908		
18	187,708	34,413	17,468	199,588	1 16	0 70	0 46	552,303	6,060,128	73,300	1,131,153	6,241,504	2,985,509	9,401,213		
19	95,648	43,344	860	139,852	1 32	0 73	0 59	241,107	4,240,025	56,545	1,478,423	4,023,270	3,489,760	7,569,575		
20	27,722	12,064	212	39,998	0 89	0 50	0 39	58,802	876,734	12,739	148,667	1,164,324	723,640	1,561,908		
	2,287,454	1,312,388	265,208	3,865,050	\$1 46	\$0 77	\$0 69	7,336,251	126,871,399	1,958,331	67,091,613	116,352,900	125,646,847	242,958,078		

[We have been compelled to omit the names of the several roads in this page, but they will be seen by referring to the numbers on the previous page, which correspond with those on this.]

A COMPLETE STATISTICAL VIEW OF THE RAILROADS OF NEW YORK STATE IN 1848.

ABSTRACT OF REPORTS RECEIVED FROM NEW YORK RAILROAD COMPANIES, GIVING CERTAIN STATISTICAL INFORMATION FOR THE YEAR 1848, PURSUANT TO A RESOLUTION OF THE ASSEMBLY OF THE 2D DAY OF FEBRUARY, 1848.

No.	Name of road.	No. of miles of road in operation.	Cost of construction.	Total expenses for			No. of passengers through.	No. of passengers way.	Receipts from through passengers.	Receipts from way passengers.	Total income from passengers.
				repairing and running the road.	constructing, repairing and running the road.	running the road.					
28†	Albany and West Stockbridge.	88†	\$1,924,701 67	\$44,045 10	\$1,968,746 77	77	38,979	30,000	\$13,000 00	\$13,000 00	\$13,000 00
28	Lockport and Niagara Falls.	28	210,000 00	11,000 00	221,000 00	00	10,000	10,000	.....	.....	.....
..	Hudson River*.	..	.....	.....	.....	.....	.....	.....	.....	.....	.....
40	Saratoga and Washington.	40	948,372 09	821 75	949,193 84	64	707	5,327	.....	.....	8,566 96
3†	Leviathan.	3†	27,000 00	6,673 68	33,673 68	30,931	80,931	.....	.....	.....	7,136 94
..	Stancates and Jordan.	..	27,261 60	2,502 57	29,764 17	17	4,070	2,064	1,271 87	251 01	1,522 88
81†	Hudson and Berkshire.	81†	807,774 11	11,209 31	818,983 42	42	65	10,427	65 00	4,586 86	4,601 86
53	Syracuse and Utica.	53	1,968,086 42	577,383 38	2,545,419 80	80	114,151	102,659†	220,671 25	70,160 75	296,831 98
74	New York and Erie.	74	3,276,678 76	195,508 49	3,472,187 25	25	38,324†	259,744†	35,613 82	90,108 50	135,722 32
6	Troy and Greenbush.	6	278,625 98	47,328 89	320,954 89	89	197,949	.....	35,106 87	.....	35,106 87
96†	Long Island.	96†	2,087,639 94	186,006 28	2,273,646 17	17	180,645	.....	.....	.....	106,964 66
29	Cayuga and Susquehanna.	29	18,000 00	15,906 09	33,906 09	09	2,438	.....	2,250 75	194 96	3,375 01
26	Auburn and Syracuse.	26	1,125,886 77	69,428 21	1,195,314 98	98	140,084	14,131	.....	.....	132,667 65
80	New York and Harlem.	80	3,570,567 41	193,480 87	3,773,068 28	28	32,343	.....	32,343 00	221,610 12	253,953 12
..	Attica and Buffalo.	..	821,313 87	899,869 85	1,221,183 72	72	127,004	19,231	110,748 84	8,703 13	119,446 47
20†	Schenectady and Troy.	20†	659,668 84	46,717 74	706,386 18	18	58,322	7,492	.....	.....	31,826 49
78	Utica and Schenectady.	78	3,161,698 15	328,108 76	3,489,796 91	91	163,971†	106,485†	422,976 08	143,908 78	566,884 81
12	Northern.	12	781,031 98	.....	.....	.....	.....	.....	.....	.....	.....
25	Buffalo and Niagara Falls.	25	350,396 63	24,525 55	374,922 18	18	86,049	10,096	.....	.....	56,768 22
25	Rensselaer and Saratoga.	25	661,910 93	89,916 31	751,827 24	24	17,964†	80,523†	30,266 83	13,406 78	33,669 11
43†	Tonawanda.	43†	974,865 66	85,611 48	1,060,477 14	14	109,234†	89,209	145,008 68	24,954 59	169,963 27
22	Saratoga and Schenectady.	22	331,036 37	27,116 03	358,152 39	39	18,534	32,933	30,860 75	13,667 68	33,518 43
78	Auburn and Rochester.	78	2,644,520 35	188,027 76	2,832,548 11	11	100,782	108,477†	250,794 45	107,676 85	358,471 30
8	Buffalo and Black Rock.	8	30,000 00	2,041 06	32,041 06	06	24,880	.....	.....	.....	2,010 40
16	Albany and Schenectady.	16	1,606,196 70	66,345 55	1,672,542 25	25	236,889	.....	.....	.....	113,741 34

* Not in operation.

A COMPLETE STATISTICAL VIEW OF THE RAILROADS OF NEW YORK STATE IN 1848—CONTINUED.

ABSTRACT OF REPORTS RECEIVED FROM NEW YORK RAILROAD COMPANIES, GIVING CERTAIN STATISTICAL INFORMATION FOR THE YEAR 1848, PURSUANT TO A RESOLUTION OF THE ASSEMBLY OF THE 2D DAY OF FEBRUARY, 1843.

Name of road.	Income from freight and other sources.	Dividends.	No. of			No. of			Average			No. of miles			Total No. of		
			locomotives.	passenger cars.	freight cars.	oth. cars.	shops.	horses.	company.	trains.	passenger and freight trains.	run by passenger and freight trains.	run by passenger and freight trains.	run by passenger and freight trains.	run by passenger and freight trains.	run by passenger and freight trains.	run by passenger and freight trains.
Albany and West Stockbridge.	\$760 00	.....	3	6	5	1	..	..	20	86,000	185,807	189,572	86,000	185,807	189,572	86,000	185,807
Lockport and Niagara Falls.	.....	.....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Hudson River.	.....	.....	3	7	17	..	1	..	40	4,250	640	4,890	4,250	640	4,890	4,250	640
Saratoga and Washington.	.....	.....	..	5	2	1	..	16	11	..	..	10,190	..	..	10,190	..	..
Lewisville.	746 71	.....	..	..	..	..	..	..	..	..	..	15,080	..	..	15,080	..	..
Skaneateles and Jordan.	1,976 30	\$996 61	..	2	5	..	..	5	5	8,330	6,760	15,080	8,330	6,760	15,080	8,330	6,760
Hudson and Berkshire.	10,719 45	.....	3	2	54	..	1	6	100	..	..	17,116	..	..	17,116	..	..
Syracuse and Utica.	380,839 46	100,000 00	15	26	123	65	3	..	550	100,594	103,000	203,594	100,594	103,000	203,594	100,594	103,000
New York and Erie.	186,190 43	183,437 32	19	24	383	77	1	..	300	86,898	117,328	203,594	86,898	117,328	203,594	86,898	117,328
Troy and Greenbush.	24,947 00	7,483 50	3	3	19	..	1	3	70	50,064	9,008	59,072	50,064	9,008	59,072	50,064	9,008
Long Island.	49,184 06	.....	15	21	147	14	3	10	140	94,294	82,988	177,277	94,294	82,988	177,277	94,294	82,988
Cayuga and Susquehanna.	15,694 20	.....	1	3	52	..	..	35	26	12,180	10,484	22,664	12,180	10,484	22,664	12,180	10,484
Auburn and Syracuse.	39,517 36	82,000 00	6	8	32	18	1	..	230	59,156	29,888	88,844	59,156	29,888	88,844	59,156	29,888
New York and Harlem.	65,082 13	38,167 56	13	40	35	11	1	205	270	180,000	29,000	209,000	180,000	29,000	209,000	180,000	29,000
Albany and Buffalo.	81,613 27	86,000 00	6	8	32	24	2	..	76	59,896	18,768	78,664	59,896	18,768	78,664	59,896	18,768
Schenectady and Troy.	15,198 82	.....	3	7	38	24	1	..	44	55,917	13,088	68,955	55,917	13,088	68,955	55,917	13,088
Utica and Schenectady.	239,354 56	528,200 00	19	..	187	..	2	3	290	146,340	183,650	279,990	146,340	183,650	279,990	146,340	183,650
Northern.	.....	.....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Buffalo and Niagara Falls.	4,246 81	15,930 46	4	11	7	..	1	3	32	..	..	25,124	..	..	25,124	..	..
Rensselaer and Saratoga.	196,090 08	.....	3	8	14	..	..	..	46	26,486	13,692	40,178	26,486	13,692	40,178	26,486	13,692
Tonawanda.	67,338 46	49,427 00	6	9	46	25	1	3	93	66,600	41,792	108,392	66,600	41,792	108,392	66,600	41,792
Saratoga and Schenectady.	23,600 53	.....	3	4	6	..	..	..	30	..	..	25,433	..	..	25,433	..	..
Auburn and Rochester.	96,250 57	8 per cent.	19	19	71	..	3	..	387	146,042	149,329	295,371	146,042	149,329	295,371	146,042	149,329
Buffalo and Black Rock.	.....	.....	..	3	..	..	..	8	3	..	..	20,400	..	..	20,400	..	..
Albany and Schenectady.	62,180 55	70,000 00	6	29	51	60	1	4	131	41,408	36,572	77,980	41,408	36,572	77,980	41,408	36,572

COMMERCIAL REGULATIONS.

SWEDISH TARIFF.

THE intention of the late Swedish Diet, to reject the prohibitions in the tariff, did not meet the co-operation and sanction of the King and Council, and the following articles are still forbidden :—

Alcohol and spirits from seeds or potatoes, except gin.....	Forbid.	Cast iron—pig or ballast, hoop & flat, or plates not trimmed....	Forbid.
Alcohol and spirits from fruits, except French cogniac.....	"	Saltpeter, all kinds.....	"
Cards for playing, of all descriptions.....	"	Syrup of brown or white sugar, forbidden until 1850, and then admitted at a high duty.....	"
Clothing, ready made, of all kinds, except brought by travelers...	"	Sugar—loaf, candy and cake, forbidden until 1850, and then admitted as above.....	"
Earthenware—stone China, printed or painted.....	"		

EXTRACT FROM THE SWEDISH TARIFF RELATING TO THE DUTIES LAYED ON COTTON AND WOOLEN MANUFACTURES.

Manufactures of silk—

	Duty.
Plush.....per lb.	\$0 60
Crape.....	2 60
Gauze.....	3 14
Brocaded with gold or silver, pure.....	8 00
Brocaded with gold or silver, imitation.....	2 60
Velvet.....	1 60

Note.—When silk appears on the face and cotton on the back, the articles are charged as *silk*.

All plain, chequered, striped, or variegated, in which there is no figure.....

Other sorts not specified...per lb.	Prohib. \$2 40
Shawls, shawlette, and kerchiefs, of gauze, Benne de Soie, or similar fabrics, figured by printing or pressing, including those with stamped figures on the sides and corners.....per lb.	2 60

All other sorts, whether plain, single, colored, or figured.....

Manufactures of *part* silk, mixed with cotton, wool, or other materials—

Plush.....per lb.	\$0 60
Other sorts.....	1 00
Shawls, kerchiefs, under the value of \$4 each.....	Forbid.

Half silk manufactures—

Shawls and kerchiefs of the value of \$4 and over, on each \$40 of value.....	\$8 00
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Cotton manufactures—

White and other cloths, having over 76 threads to the inch, and at least 36 inches wide.....per lb.	0 40
---	------

Cotton manufactures—

	Duty.
Corduroy, velveteens, satina, jeans, fustians, and similar fabrics.....per lb.	0 36
Dimity.....	0 36
Plush felt.....	0 06
Blankets.....	0 14
Gauze, book muslin, muslin, & mull muslin.....per lb.	0 40
Quilting and quilts.....	0 40
Bobinetta.....	0 60
Other kinds, such as figured... Plain, such as <i>calicoes</i> and <i>shirtings</i>	0 50 Prohib.

Note.—Such white cottons as are permitted may be imported as kerchiefs, paying the same duties charged for cotton cloth.

Dyed cottons—

Note.—The same sorts are admitted at the same duties with those denominated white.

Plain.....	Forbid.
Of different colored yarn.....	"
Blankets.....	\$0 14

Note.—In addition to those paying the same duty as *white*, all others exceeding the fineness of 80 threads to the inch...per lb.

All other kinds.....	Prohib.
Cotton shawls and kerchiefs, figured and printed, being forty-two inches square without the fringe.....per lb.	\$0 43
Cotton shawls & kerchiefs, plain, of dyed yarn or printed, less than forty-two inches square without the fringe.....	Prohib.

Half cotton manufactures, mixed with flax or hemp—		Other sorts, less than forty-two inches in width.....per lb.	\$0 28
Damask.....per lb.	\$0 28	Other sorts, forty-two inches and over.....per lb.	0 40
“diaper.....	0 20	<i>Note.</i> —Articles submitted for duty consisting of more than half wool, are classed as woollens.	
Other goods pay the same duty as similar articles of cotton.			
Woolen manufactures—			
Baize.....	Forbid.	Shawls and kerchiefs of wool and cotton, under the value of \$2 50 each.....	Prohib.
Cassimere—white, yellow, and red, not over thirty-six inches in width.....per lb.	\$0 60	Shawls and kerchiefs of wool and cotton, of and above the value of \$2 50 each, on \$40 worth.....	\$8 00
Flannel—of woolen warp and worsted weft, dyed, of greater breadth than 39 inches..	Prohib.	Manufactures of hemp and flax—	
All other sorts.....per lb.	\$0 28	Canvas.....per lb.	0 10
Blankets and carpets.....	0 20	Bedticking.....	0 18
Freize, duffle, and calumc, cloth, ladies' cloth, half cloth, corduroy, buckskins, and also cassimeres of other colors than those above stated, exceeding thirty-six inches in width.....	Prohib.	Sacking.....	0 07
Flag cloth.....per lb.	\$0 40	Damask.....	0 80
Packing or prepared cloth....	0 02	Diaper and twills.....	0 28
Other sorts.....	0 20	Cambric and batiste.....	1 46
Mixed woolen manufactures—		Book muslin.....	0 75
Flannel.....	Prohib.	Linen weighing less than 1½ oz. per square of two feet..	Forbid.
		All other kinds.....per lb.	\$0 66
		Sail and tent cloth.....	0 06
		Other sorts.....	0 40
		Kerchiefs.....	0 40

By comparing the foregoing extract with the duties on woven goods in the tariff of 1846–1848, inclusive, it will be found that no alterations have been made, except striking out one or two reduced duties at which certain articles were admitted when brought direct from the East Indies.

In all that affects American produce and manufacture there is no change for the better in the present tariff. The tobacco duties still remain the same; sugar, in general, is highly taxed, and the admission of loaf sugar forbidden until 1850; while such of our cotton and woolen manufactures as are allowed at all, are loaded with duties so onerous as to prevent their shipment. Calicoes and shirtings are expressly excluded; while cambrics, and other articles coming under the denomination of “plain cottons,” are admitted only when containing over 76 threads or 80 threads to the inch, as they are white or colored. This, it will be seen, strikes at once from the list of merchandises for the Swedish markets all the coarser cottons and woolen manufactures which find a ready sale or yield any considerable profit.

COLLECTION DISTRICT OF UPPER CALIFORNIA.

At the close of the last session of the Congress of the United States, an act was passed to extend the revenue laws of the United States over the territory and waters of Upper California, and to create a collection district therein.

SECTION 1. Provides that the revenue laws of the United States shall be extended to and over the main land and waters of all that portion of territory ceded to the United States by the Mexican Republic, by a treaty concluded on the 2d of February, 1848, heretofore designated and known as Upper California.

Sec. 2. Provides that all the ports, harbors, bays, and rivers of the Territory of Upper California, shall constitute a collection district, and that a port of entry shall be established for said district at San Francisco. The collector appointed, as usual, by the President of the United States.

Sec. 3. Provides that ports of delivery shall be and are hereby established in the collection district aforesaid, at San Diego, Monterey, and at some convenient point

within the territory of the United States, to be selected by the Secretary of the Treasury, as near as may be to the junction of the rivers Gila and Colorado, at the head of the Gulf of California. And the collector of said district of California is hereby authorized to appoint, with the approbation of the Secretary of the Treasury, three deputy collectors, to be stationed at the ports of delivery aforesaid.

Sec. 4. Provides, that collector of said district shall be allowed a compensation of \$1,500 per annum, and the fees and commissions allowed by law; and the said deputy collectors shall each be allowed a compensation of one thousand dollars per annum, and the fees and commissions allowed by law.

Sec. 5. Provides, that until otherwise provided by law, all violations of the revenue laws of the United States, committed within the district of Upper California, shall be prosecuted in the district court of Louisiana, or the supreme court of Oregon, which courts shall have original jurisdiction, and may take cognizance of all cases arising under the revenue laws in the said district of Upper California, and shall proceed therein in the same manner and with the like effect as if such cases had arisen within the district or territory where the prosecution shall be brought.

Sec. 6. The act to take effect from and after the 10th of March, 1849.

EXPLANATIONS OF THE WAREHOUSING SYSTEM.

CIRCULAR INSTRUCTIONS TO THE COLLECTORS AND OTHER OFFICERS OF THE CUSTOMS.

TREASURY DEPARTMENT, March 23, 1849.

The act of Congress approved 3d of March, 1849, entitled "An act requiring all moneys received from customs, and from all other sources, to be paid immediately into the Treasury without abatement or reduction, and for other purposes," contains the following provisions in the fifth section thereof, to wit:—

"*And be it further enacted*, That from and after the 30th of June next, all imports subject to duty, and whereon the duties are not paid when assessed, shall be deposited in the public warehouse, from whence they may be taken out for immediate exportation under the provisions of that act, at any time within two years, and, on payment of the duties, may be withdrawn for consumption within the United States at any time within one year; but no goods subject to duty shall be hereafter entered for drawback or exported for drawback after they are withdrawn from the custody of the officers of the customs. *Provided, however*, That nothing herein contained is intended to modify the laws relating to the export of goods to Canada or Chihuahua, if the goods when entered for export are immediately taken out of the United States, nor is it intended hereby to modify the laws in relation to pickled fish or refined sugar."

It is to be remarked that this section modifies the provisions of the warehousing act of the 6th of August, 1846, by the extension "from and after the 30th June next" of the period for imports subject to duty to remain in warehouse under bond from one to two years, with the privilege of being withdrawn from warehouse for immediate exportation, under the provisions of the warehousing act, at any time within said period of two years, but still requires goods to be withdrawn from warehouse on payment of duties for consumption within the United States at any time within one year, as enjoined by the act of the 6th of August, 1846.

The extension of the period to two years also applies to any goods subject to duty, heretofore imported, that may remain in public warehouse on the 30th day of June next, on which the duties shall not have been paid, and which shall not have been deposited in warehouse beyond one year; all such goods will be entitled to the extension of time given in this act, and remain in warehouse with the right of exportation at any time within two years from their respective dates of import entry. Consequently any goods subject to duty, imported from and after the 30th of June next, as also goods imported prior to that date that shall not have been entered and withdrawn for consumption within one year from the date of the import entry, cannot after the lapse of one year be so entered and withdrawn, but may remain in warehouse under bond with the privilege of being exported beyond the limits of the United States at any time within the period of two years.

Any goods, however, on which the duties shall not have been paid that may remain in warehouse beyond the aforesaid period of two years, must be appraised and sold to realize the duties and charges thereon, in pursuance of the warehousing act of the 6th of August, 1846, and the instructions of the department of collectors, and other officers of the customs, issued under said act on the 14th of August, 1846.

The section of the act under consideration also provides that "no goods subject to duty shall be hereafter entered for drawback, or exported for drawback after they are withdrawn from the custody of the officers of the customs," with the exception of goods exported to Canada or Chihuahua, as also pickled fish and refined sugar.

The construction given by the Department of the terms of the act above quoted is, that the right of drawback exists under former laws in the case of all goods in the country entitled to drawback on the 3d of March instant, the date of approval of this act; and that, in regard to all goods imported subsequently to that date, they became subject to the provisions of this act, with the exception of those especially exempted therefrom.

W. M. MEREDITH, *Sec. of the Treasury.*

CARRIAGE OF PASSENGERS IN MERCHANT VESSELS.

CIRCULAR INSTRUCTIONS TO COLLECTORS AND OTHER OFFICERS OF THE CUSTOMS.

TREASURY DEPARTMENT, *March 2, 1849.*

The particular attention of Collectors and other officers of the Customs is called to the subjoined act of Congress, approved 3d March, 1849, entitled "An act to extend the provisions of all laws now in force relating to the carriage of passengers in merchant vessels and the regulation thereof."

On examination of this act, it will be perceived that, with certain modifications mentioned, it extends the provisions of the laws referred to, to "all vessels bound from any port in the United States to any port or place in the Pacific Ocean, or on its tributaries, or from any such port, or place, to any port in the United States, or on the Atlantic or its tributaries."

Your attention is called to the modification of the 4th section of the act of the 17th May, 1848, "to provide for the ventilation of passenger vessels, and for other purposes," and also to the amendment of the act of 22d February, 1847, "to regulate the carriage of passengers in merchant vessels."

The instructions issued by the Department under former laws on this subject, under dates of 17th March and 13th May, 1847, and 6th June, 1848, are to be pursued in the enforcement of this act so far as applicable to its provisions.

W. M. MEREDITH, *Sec. of the Treasury.*

AN ACT TO EXTEND THE PROVISIONS OF ALL LAWS NOW IN FORCE RELATING TO THE CARRIAGE OF PASSENGERS IN MERCHANT VESSELS, AND THE REGULATION THEREOF.

Be it enacted by the Senate and House of Representatives of the United States of America, in Congress assembled, That all vessels bound from any port in the United States to any port or place in the Pacific Ocean or on its tributaries, or from any such port or place to any port in the United States on the Atlantic or its tributaries, shall be subject to the provisions of all the laws now in force relating to the carriage of passengers in merchant vessels sailing to and from foreign countries, and the regulation thereof, except the fourth section of the "Act to provide for the ventilation of passenger vessels, and for other purposes," approved May 17, 1848, relating to provisions, water and fuel; but the owners and masters of all such vessels shall in all cases furnish to each passenger the daily supply of water therein mentioned; and they shall furnish, or cause the passengers to furnish for themselves, a sufficient supply of good and wholesome food; and in case they shall fail so to do, or shall provide unwholesome or unsuitable provisions, they shall be subject to the penalty provided in the said fourth section, in case the passengers are put on short allowance of water or provisions.

SEC. 2. *And be it further enacted,* That the act entitled "An act to regulate the carriage of passengers in merchant vessels," approved February twenty-second, eighteen hundred and forty-seven, shall be so amended, as that a vessel passing into or through the tropics shall be allowed to carry the same number of passengers as vessels that do not enter the tropics.

SEC. 3. *And be it further enacted,* That this act shall take effect on and after the fifteenth day of March, eighteen hundred and forty-nine.

Approved March 3, 1849.

DEPARTMENT OF STATE, *March 2, 1849.*

BRITISH AND UNITED STATES INTERNATIONAL MAILS.

NOTICE TO THE PUBLIC AND INSTRUCTION TO POSTMASTERS RELATIVE TO THE RATING OF LETTERS, THE RETURN OF DEAD LETTERS, TRANSIENT NEWSPAPERS, AND THE POSTMARKING OF LETTERS CONVEYED BY THE BRITISH AND UNITED STATES INTERNATIONAL MAILS.

Hereafter, when a letter exceeds an ounce in weight, but does not exceed two ounces, it will be rated with four charges of single postage; when it exceeds two ounces, but does not exceed three, it will be rated with six charges of single postage; and so on, there being a single postage on the first half ounce, a double charge for the first ounce, and two additional charges for each succeeding ounce, or *fraction of an ounce*, beyond the first ounce. This is ordered in virtue of an act of Congress approved March 3, 1849.

And, in pursuance of the same act, it is required that letters which are refused at the office of delivery, by the parties addressed, and letters which, for any other cause, cannot be delivered to said parties, shall be immediately returned to the Dead Letter office in Washington, under address to the Third Assistant Postmaster General, without waiting the time for advertising, as heretofore required in relation to this class of dead letters. They must in every case be marked in red ink on the face, with an entry showing they are refused, or the cause that prevents their delivery; also stamped with the stamp of the office, and, with a view to the proper adjustment of the accounts, be placed under the postbill to the Dead Letter office.

Transient newspapers (that is, papers not sent from the office of publication) will hereafter be subject to newspaper postage rate only; that is, one cent for any distance exceeding one hundred miles, where the newspaper is sent from one State into another. But postage on such newspapers is in all cases to be prepaid, as heretofore.

In respect to British mails, where the official postage entries on the letters received are in red ink, the letter is considered as paid, and is to be delivered accordingly; where in black ink, as unpaid, and the postage is to be collected. Postage in such cases is either wholly paid or wholly unpaid. The postage figures on such letters show, on the paid letters, the amount to be credited to the United States; on the unpaid letters, the amount charged to the United States. The postage to be collected from unpaid British letters is in all cases to be, whatever may be their debit or credit figures, 24 cents when single, with an additional 24 cents for each additional rate; and after the first ounce, each letter exceeding that weight is to be charged 48 cents for each additional ounce or fraction of an ounce.

J. COLLAMER, *P. M. General*.

POST OFFICE DEPARTMENT, March 15, 1849.

APPRAISEMENT OF DAMAGED GOODS.

The following Circular to Collectors of Customs contains information of importance to importers of foreign goods, wares, and merchandise:—

TREASURY DEPARTMENT, February 1, 1848.

Directions are given that no order shall be issued by any Collector of the Customs to estimate and appraise damage on goods, wares, and merchandise, sustained during the voyage of importation, in pursuance of the 52d section of the act of 2d March, 1799, unless proof of the existence of such damage be lodged in the custom-house within ten days after the landing of any such goods, wares, and merchandise. The proof required will be a certificate under oath, submitted to the Collector by the owner, consignee, or agent, or other reliable person or persons, after a personal inspection made by the person or persons so certifying, of the condition of the vessel and cargo, and their belief of the existence of damage.

When the damage is ascertained, the appraisers should forthwith report to the Collector, that the amount of damage may in all cases be deducted from the dutiable value before the entry is imported. Whenever the entry has been imported before the damage is deducted, a satisfactory reason for such delay must be stated to this Department, or authority to refund the excess of duty collected will be refused.

In all cases where importers protest against the rate or amount of duty exacted on any entry, a record must be kept by the cashier, or other officer receiving the money, and the protest should be checked with the initials of the cashier or other officer; and whenever a claim is made to have the excess refunded, reference must be had to such record, in proof of the validity of the protest.

R. J. WALKER, *Secretary of the Treasury*.

JOURNAL OF MINING AND MANUFACTURES.

VERMILION AS AN ARTICLE OF EXPORT FROM CALIFORNIA.

FREEMAN HUNT, Esq., *Editor of the Merchants' Magazine, etc.*

DEAR SIR:—The Mercury Mines in Upper California, next to the gold diggings, promise to be of great importance to the emigrant to that country. Rocks and mountains, to the height of several thousand feet, have already been found to consist of nothing but cinnabar, and many more will undoubtedly be developed by the pursuit of the mineralogists and geologists flocking there. The attention will naturally be drawn to the metallurgical operations of this ore, to reduce the same into metallic quicksilver, which forms the most useful vehicle for the treatment of the auriferous sands. Also, large quantities of quicksilver being required in the silver mines of Mexico, Peru, &c., it will therefore be exported into those countries to a considerable extent.

It is well known that the operation of distilling the metallic mercury from the cinnabar does not require much skill, and but very simple apparatus; they are the same nearly as were used eighteen hundred years ago. To extract a considerable quantity at very little expense, with a common lime kiln or blast-furnace properly constructed, large quantities of the mercurial ores, intermixed with slacked lime or blacksmith iron scales, can be calcined or exposed to a red heat for twenty-four hours, and proper precautions used to prevent the rising mercurial vapors from escaping through any other place than those orifices constructed in the chimneys so as to be precipitated therein in the cold water running through to the reservoir at their bottoms, whereby not less than 2000 lbs. can daily be manufactured.

If we consider the inexhaustible supply of the material, and the high specific gravity of cinnabar, which is eight times heavier than water, we can form some idea what a quantity of quicksilver may be produced out of a hill of 1000 square feet. Admitting 100 lbs. of cinnabar to consist of 86 of mercury and 14 of sulphur, nearly half a million of pure quicksilver may be extracted out of such a single mountain. How many million pounds of quicksilver can, by several manufactories, be produced from a whole range of such mountains, when their bowels contain nothing but cinnabar? It is obvious that California will be able to produce more quicksilver than the home consumption will warrant, and it will necessarily be wrought into other useful applications, such as vermilion, which has hitherto been imported from China and several European cities, as Cadiz, Idria, &c. Four thousand quintals are annually exported from the latter city, and nearly 10,000 quintals from China.

Vermilion may likewise be manufactured without great chemical skill. The native cinnabar, although chemically and physically the same as vermilion, is never free from foreign matter, and cannot be used in the arts. The only way of obtaining vermilion of a bright color is by preparing it from its elements, which are the quicksilver and sulphur. California abounds in cinnabar mines, and a great many chemists will undoubtedly turn their attention to the production of metallic quicksilver from its ores; it will at the same time open a new branch of industry, to manufacture the vermilion, which will not only give a profitable source for supplying the Indians, who consume a very considerable amount, but will in a short time become an article of export. I feel confident of performing a service to the uninitiated by contributing my mite of experience, acquired during my early travels in the southern parts of Europe, where all the vermilion is manufactured that is so largely imported in this country. Two methods are pursued for the preparation of vermilion—the *dry*, or pyrochemical, and *wet*, or hydrochemical. By far the largest quantity is made in the dry process. In an iron pot 100 lbs. sulphur are brought to its melting point, and 1000 lbs. of metallic quicksilver are added in small portions, until the whole is well mixed. Caution must be used that the whole mass does not explode, as both substances unite together with great avidity. The black mass so obtained is now pulverized, and prepared for sublimation in very large earthen pots, around which the flues of the fire reach two-thirds of their height. Quantities of 2 lbs. of the black mass, and then 4 and 6 lbs., is thrown into them while red hot, until about 400 lbs. are put in each vessel, during which period the flame often bursts out a great distance. As soon as the flame has subsided, the pots are covered with an iron plate and the fire increased to the end of sublimation, which generally lasts thirty-six hours. If, on lifting the plate, the flame does not rise more than a few inches above the surface, the heat is just sufficient for sublima-

tion. It is also necessary to stir up the mass every quarter or half hour, in order to accelerate the operation. When cold the pots are broken up, and with but a loss of about 10 per cent. The vermillion is sublimed around the walls of the pots.

Another mode pursued for obtaining the vermillion in the dry way, is to mix 10 lbs. of finely powdered sulphur with 50 lbs. of quicksilver in a barrel, which is kept in motion for several hours until both substances are both intricately and chemically combined together. The black mass is then put in pots in order to dry it and drive off the excess of sulphur, whereby sometimes an explosion takes place. When the mass is quite dry it is made quite loose, the pots supplied with helms and adapters of earthen ware, the fire renewed, and kept up for three or four hours. When the small flame coming out of the orifice of the helm becomes steady and small, the process of sublimation begins; it is left to cool, the helm is then broken up, and the red lump of vermillion is separated from the black mass, which is reserved for another sublimation. The lump vermillion is then ground between two stones quite fine, and levigated, and for the purpose of brightening its color it is either washed with potash lye, or digested in spirits of hartshorn or putrified urine; then again carefully washed out with plenty of water, dried and rubbed fine, and preserved in leather bags.

The *wet*, or *hydrochemical* method, is the following:—300 lbs. quicksilver, 100 lbs. fine sulphur, about 400 lbs. water, and about 100 lbs. potash are well mixed in a barrel, which is kept in motion for several hours, then heated at a moderate fire, and then removed the moment the mass has become of the proper red color. The floating liquid is then poured off, and a quantity of weak lye added and digested for some days; when this is removed, the red mass is frequently washed and then dried. Sulphuret of potash, or sulphuret of ammonia, mixed with quicksilver and kept in motion for some time, produces the most brilliant vermillion. The vermillion by this method is always distinguished for its intensity and brightness of color.

As vermillion is frequently adulterated, on account of its high price, (£1 50 per lb.) with other less valuable pigments, such as the chromate of lead, called the English and American vermillion, red lead, peroxide of iron or colcothar, and other still more inferior earthy colors, it will be well to state that pure vermillion is volatilizable before the blowpipe, without leaving any residue. If there remains upon the charcoal any substance after having applied the blowpipe, it can only be the chrome of iron, the lead from the red lead, and the chromate of lead will show its metallic globules. If nitric acid is used for test, the iron, lead, or brick dust will easily be distinguished; but pure vermillion is not at all acted upon by cold nitric, muriatic, or acetic acids. By adding in a small glass tube, to a quantity of vermillion, either a little lime, iron, tin, or antimony, metallic quicksilver is sublimed, and whatever remains is the adulteration.

Vermilion has a specific gravity of 8.1, and is composed of 86 parts quicksilver and 14 of sulphur—100, is free from smell or taste, and is, on account of permanency in the fire, used for coloring sealing wax and for making red printing ink. For coloring pictures, faces, &c., it is much esteemed. Respectfully, yours,

LEWIS FEUCHTWANGER.

THE COAL FIELDS AND COAL TRADE OF OHIO.

The superficial coal area of Ohio, according to Taylor, in his "Statistics of Coal," is computed at 11,900 square miles. The attention of the Ohio Legislature having been called to the subject by the governor, Professor W. W. Mather, in association with Dr. J. Locke and other competent assistants, commenced the survey, and one report of their joint labors appeared in 1837, and another in 1838. From the magnitude of the great Allegheny coal field, which comprises one-third of the entire area of the State—bordered by the Ohio River for three hundred miles, and intersected longitudinally and centrally by the Ohio and Erie Canal—it will readily be perceived that its local coal mines must be classed with the most prolific sources of local productive industry.* Mr. Mather, in his First Annual Report, says:—"Probably a mean thickness of six feet of coal, capable of being worked over five thousand square miles, is a moderate estimate of the resources of Ohio in this combustible. In the official report to Congress in 1841, it appears that there were raised in the State of Ohio in 1840, 125,478 tons

* Taylor's Statistics of Coal, p. 56.

minous coal, employing 438 workmen, and \$46,775 of capital. The Cincinnati one of the best conducted and most reliable journals in Ohio, in exhibiting the facts of this business, says:—

It is almost impossible to estimate the amount of coal in the State of Ohio. It is incredible when we come to estimate the amount even in a single county. Take, for example, the county of Tuscarawas, on the Ohio Canal. This county has 550 square miles of land, and coal may be obtained on every mile of it. In Professor Mather's valuable work on Geology, it is estimated that this county has imbedded in it more than *eighty millions of bushels of coal!* This is enough to supply this State, if its population were quadrupled, for centuries to come! So the county of Muskingum can supply *thousand millions of bushels!* These are interior counties, and at present supply nothing, compared with the counties of Meigs, Athens, and Summit. But as the population increases in the interior, manufactures will arise, and the coal of the interior counties be in great demand."

The consumption of coal by families in the large towns of Ohio, according to the report quoted, is increasing with great rapidity. In 1834, the coal trade had commenced in the county of Meigs, and this last year (1848) there was at 100,000 bushels got out in that county. Ten years since, the town of Pomeroy, in Adams county, had no existence, and in January last, by a census taken, it had 3,000 inhabitants. So, also, at Nelsonville, in Athens county, no coal was exported before the Ohio Canal was made; but in the current year (1848) the coal got out there was near a million of bushels, which goes into the consumption of towns, which at that time consumed no coal.

The following tabular statement, compiled by the editors of the *Atlas* (E. D. Mansfield & F. A. Foster, Esqs.) from statistical documents, presents a view of the production of coal for the years 1840, 1843, 1847, and 1848:—

PRODUCT OF COAL IN SEVERAL COUNTIES OF OHIO.

	1840.	1843.	1847.	1848.
	<i>Bush.</i>	<i>Bush.</i>	<i>Bush.</i>	<i>Bush.</i>
Adams.....	84,200	100,000	587,653	715,104
Allen.....	188,200	200,000	200,000	225,000
Ashtabula.....	163,000	200,000	200,000	200,000
Cuyahoga.....	15,400	30,000	40,000	45,000
Franklin.....	55,858	60,000	60,000	60,000
Geauga.....	189,500	200,000	200,000	200,000
Hamilton.....	5,000	5,000	10,000	10,000
Lawrence.....	55,500	60,000	70,000	75,000
Licking.....	843,400	1,200,000	2,000,000	2,500,000
Logan.....	5,450	6,000	10,000	15,000
Madison.....	77,400	80,000	80,000	80,000
Marion.....	34,190	35,000	40,000	40,000
Meigs.....	41,100	40,000	45,000	45,000
Monroe.....	33,800	35,000	40,000	151,467
Muskingum.....	254,040	361,805	1,287,170	1,837,377
Noble.....	292,230	350,000	275,000	285,020
Richmond.....	10,000	10,000	10,000	15,000
Summit.....	34,000	35,000	40,000	40,000
Total.....	2,382,368	2,907,805	5,084,823	6,538,968

In those counties where there are no public works, and no iron manufactures, the editors estimate the product of coal to remain nearly the same, because the coal is local and domestic; but in those counties where the public works run, the increase is great. The above table is nearly correct; but it is unquestionably somewhat under the mark. To Summit county they have credited the entire amount of coal mined from the port of Akron; but it is probable that some portion of it came

there by the Ohio and Pennsylvania Canal, from places in the line of the canal. The general result, however, is nearly the truth.

The comparison of aggregates shows that—

From 1840 to 1843 the increase was	24 per cent.
" 1843 1847 "	65 "
" 1847 1848 "	28 "

In the first three years the *annual* increase was 8 per cent—in the next four years, 16 per cent—and in the last year, 28 per cent. By the year 1860 (eleven years) the coal production of Ohio will probably exceed 20,000,000 bushels per annum, or three times the present amount.

The consumption of coal as an article of domestic fuel, has, according to the *Atlas*, very rapidly increased in the interior towns of Ohio, as the following table of the receipts for consumption at different points will show:—

	1843. Bush.	1847. Bush.	1848. Bush.
Received at Cleveland.....	387,884	1,212,887	1,369,210
" Newark.....	10,000	56,200	50,800
" Columbus.....	64,186	155,362	233,696
" Circleville.....	22,532	38,800	65,300
" Chillicothe.....	27,470	131,151	223,153
" Middletown.....	8,834	31,784	45,815
" Dayton.....	27,800	64,495	89,373
" Piqua.....	1,420	5,075	6,068
Aggregate.....	549,575	1,695,704	2,743,613

This is the consumption only of interior towns, excluding that of Cincinnati. Columbus, for example, has in five years increased the use of coal more than four-fold. Chillicothe has in the same time increased eight-fold. The coal used at Chillicothe is the Nelsonville coal, Athens county, and is of a very good quality, at a very low price. This is one of the great advantages of the public works of Ohio, which have thus enabled Chillicothe to buy Ohio coal, in Athens county, from which not a bushel would ever be taken on common roads.

Gen. CHARLES T. JAMES, an able civil engineer of Rhode Island, and a gentleman of large experience in the practical operations of manufactures, maintains that steam power can be employed in moving machinery for manufacturing purposes not only profitably, but at no greater cost than water power. This being the case, Ohio may become as extensively and profitably employed in manufactures as any of the New England States.

THE MANUFACTURE OF HATS.

The Hat, as learned dictionaries of the arts and manufactures would say, is the name of an article of dress worn upon the head of men and women, but principally by the former, and seems to have been first introduced as a distinction among the ecclesiastics in the twelfth century, though it was not till the year 1400 that it was generally adopted by respectable laymen. Since that time, great changes have taken place in regard not only to the method of manufacture, but in the materials of which it is composed. The French have excelled the English in the manufacture of the hat; particularly in the beauty of its appearance, and the fineness of its texture. In 1823, a firm in Manchester, England, obtained a patent for a peculiar kind of fabric made of cotton, or a mixture of cotton and silk, for covering hats and bonnets, in imitation of beaver. The foundation, covered by the patent fabric, consisted of felt, hemp, and wool. But this debased article does not seem to have got into very general use, as cotton, from its want of the felting property and inelasticity, is ill-adapted to making

hat bodies. Although several rather ingenious inventions have been made in England in the materials, &c., for the manufacture of this article of costume, but little progress has been effected in regard to its lightness, elegance, and durability, the principal, if not the only, requisites of a good hat.

As the art of making common hats does not involve the description of any curious machinery, or any remarkably interesting processes, we shall not enter into any very minute details upon the subject. It will be sufficient to convey to the reader a general idea of the style of its manufacture in this country, where, it is now universally admitted, the most important improvements have been effected. And as the hats made in New York are unquestionably the best produced in the world, it may not be amiss to take, as an example, the model manufactory of a house in that city. We refer to the establishment of William H. Beebe & Co. No one, we venture to say, has done more to promote improvements in this particular branch of manufacture than Mr. Beebe, who is enthusiastically devoted to the business, having, as we learn from the most reliable sources, expended the labor and profits of some ten or twelve years for the purpose of attaining the utmost degree of perfection in its manufacture. The materials of which his hats are composed, i. e., the finest quality, are of the richest and most expensive character to be found in the American or European markets; and if his business should fail of securing an immediate fortune, it cannot, in time, of obtaining for his manufactory an enduring reputation.

We come now to speak of the materials of the hats as manufactured at the present time. The plush employed for covering silk hats is a raised nap or pile woven upon a cotton foundation. The plush is manufactured in France and Germany. The finest is, however, made in the former country, at Lyons, the cost when imported varying from 80 cents to \$3 75 per yard. The body of the best silk hats, some six years since, was formed of the coarser qualities of Russia fur, and even now the same inferior article is used for the low priced hats by manufacturers who labor to produce an article to meet the demand of a large class of persons, who not unfrequently mistake cheapness for economy. Indeed, it was supposed when the silk or plush hat first made its appearance in this country, and even in Europe, that the body could be made from fur of almost any—the poorest quality—and were made even of common maulin. Experience, however, has proved beyond cavil, that in order to make a hat combining all the requisites of excellence that properly belongs to it, the body must be composed of the finest of the Russia hare's fur, of a quality equal to that employed in the manufacture of the superfine beaver hat, as its lightness, elasticity, elegance, and even durability, depend upon the fineness of the body.

We have referred to the manufactory of William H. Beebe & Co. as a model, and now propose to take the reader with us through the establishment. In order to give some idea of it, we will begin at the top of the spacious building in which the industrial operations are carried on. Ascending to the seventh story, we find a number of men engaged in stiffening, varnishing, ironing, and drying the bodies of the silk hats, which have been previously made ready for these processes at branches of the manufactory in Newark and Brooklyn. They are then passed down by means of dumb waiters to the sixth story, where the covering of silk plush is put on, and the hat made ready for trimming. In the next (fifth) story below, we notice a steam engine (five horse power) of Burden's construction, which performs many important functions, such as "hauling" the hats, hoisting the coals for the fires, and moving the dumb waiters that carry the hats in their progress downwards, as they have successively passed through the several stages of manufacture, until they come out the finished article. The fourth story is devoted mainly to finishing the fur hats by another group of men.

Passing down to the third story, we find some fifty young women engaged in sewing the plush, and trimming the hats. From this floor the hats descend by means of the dumb waiter, which is constantly in motion, passing hats in the various stages of their manufacture from one story to another, where they are curled, set, and, in short, completed for the market. They are then passed down to the first floor, where they are papered and packed in cases (except the number required for the extensive retail department of this house in the front building) for shipment to every port of the United States, and the British possessions in America. We should not omit to mention in this place what may be termed the *morale* of this establishment. The most perfect order and system is manifest in every department of the business, and we have never seen in any manufacturing establishment, of the same extent, so respectable a group of industrials, carrying on the various operations with a degree of quiet cheerfulness, that impressed us forcibly with the idea that the whole was guided by a wise head and a noble heart. In England it is scarcely possible to introduce any improvements in the manufacture of the hat, on account of the perfectly organised combination which exists among journeymen hatters throughout the kingdom, by which masters are held in a state of complete servitude, having no power to take a single apprentice into their works beyond a certain specified number, nor any sort of machinery which is likely to supersede hand labor in any remarkable degree. In this establishment the most perfect understanding exists between the employer and the employed, their interests blended, as they ever should be, by the golden rules of reciprocity and justice. And although there is here no combination to prevent the engagement of apprentices, the head of the house, as a matter of interest and choice, employs none but the most accomplished journeymen, and paying the highest rate of wages, of course, secures the most skillful labor in the market; besides workmen are retained from year to year, and paid even when business is dull. The wages of the men average \$15 per week, and girls employed in trimming, &c., earn from \$4 to \$9 per week. To give an idea of the extent of the business carried on by this house, it may be well to state that one hundred and sixty-seven persons are constantly employed in one way or another about the manufacturing and commercial departments, each branch of which is carried on separately and distinctly, no person employed in one branch having anything to do with any other. The average number of hats manufactured at this establishment is 200 per day, or about 60,000 hats per annum.

INK FOR STEEL PENS.

The following recipe, by M. Runge, is recommended as making an excellent ink for steel pens. Ten parts of logwood are exhausted with sufficient boiling water to obtain 80 parts of liquid. To 1,000 parts of this decoction is gradually added one part of yellow chromate of potash, when the liquid turns first reddish-brown, and finally bluish-black. No gum or any other additions are requisite; on the contrary, they are injurious. This liquid is an actual solution, which may be filtered; no deposit is formed in it, and the writing is not removed by immersing the paper in water.

TO DETECT INDIAN MEAL IN WHEAT FLOUR.

This process is thus described in a French journal of Medical Chemistry by M. Mazviel La Grange.

The sample is sifted and two grammes (30 grains) of the finest flour mixed in a test-tube with 4 grammes of nitric acid, and well stirred with a glass rod. After this add 60 grammes of water, and then 2 grammes of carbonate of potash dissolved in 8 grammes water. When no Indian meal is present, as soon as the carbonic acid has escaped, only yellowish flakes separate; but when this is present, some orange yellow particles subside, which are easily detected. In this way an admixture of from 4 to 8 per cent of Indian meal with wheaten flour may be detected.

NAUTICAL INTELLIGENCE.

GREAT CIRCLE SAILING.

To the Editor of the Merchants' Magazine, etc.

Attention has been directed to this subject lately by the publications made from time to time with regard to it by Lieut. Maury and others, and those who have investigated it appreciate its importance. It is to be regretted, however, that some of the oldest and most experienced navigators are so wedded to the habits derived from constant study of the charts to which they are accustomed, as to be unwilling to give it the reflection which it deserves.

A shrewd practical navigator will sometimes tell you that nothing can be shorter than a straight line between two points, and will maintain, with much obstinacy, that a theory, as he styles it, which would require him to go to a more northern latitude than that of the port to which he is destined, must be absurd. This arises from his habit of considering the earth as a plain, and a parallel of latitude as a straight line. Not that any seaman at the present day is so ignorant as to deny that the earth is a sphere, yet he is unwilling to investigate for himself all the results which necessarily follow from this admission.

The arc of a great circle is the shortest line between two points on the surface of a globe, and no parallel of latitude is a great circle except the Equator. If we were accustomed to the use of a chart on a curved surface, imitating the form of the earth, or of a portion of its surface, this truth would be evident. But a chart on a plane surface begins by establishing a false idea, which renders it difficult for many minds to correct the impressions which flow from it.

In a voyage between the ports of the United States and Great Britain the difference in distance between a great circle route and that drawn upon a chart by a straight line is not so great as it is upon other voyages between ports more distant and differently situated with respect to each other. But the saving of a few miles is often a matter of vast importance to the navigator, underwriter, and owner. Whatever contributes to make this saving is desirable.

It is with this view that the following calculation of a great circle course between Sandy Hook and the Land's End has been made. It is not possible to follow one great circle, as this would carry the route some thirty miles to the northward of Cape Race. The Nantucket and George's Shoals and Sable Island lie in the way, and the route has therefore been laid out so as to give these obstacles all a wide berth, and is composed—

1. Of an arc from Sandy Hook to a point thirty miles to the southward of Nantucket South Shoal.
2. Of an arc passing twenty miles south of George's to a point twenty-seven miles to the southward of Sable Island.
3. Of an arc passing eighteen miles south of Cape Race, to the northward of the Virgin Rocks, reaching a maximum latitude in longitude 22° , and arriving at Scilly Isles twenty-four miles to the Southward of St. Agnes light.

The magnetic course is given for each degree of longitude after deducting the variations of the compass, as laid down upon Yeates' chart of the variation of the magnet needle. According to this chart, which is that used by the sailing masters on board the Cunard steamers, which vessels invariably follow the great circle route, unless prevented by ice on the Banks, the greatest variation is in longitude 35° , where it amounts to $32^{\circ} 45'$ west of the true north, or nearly three points of the compass. So that a vessel steering S. E. by E. by compass is in fact making nearly a due east course.

The variation is, in truth, now greater than is above stated, as it is gradually increasing in a westerly direction, and is stated by some captains to have reached nearly three points and a half; but this is not yet established by repeated observations, and it has been thought best to take the variation as laid down in the chart above referred to.

There are other reasons which, it is supposed, will always render the northern route preferable to that given by the straight line on the chart. In going out the only obstacle in the way of a quick voyage arises from the easterly gales which prevail at certain seasons of the year. There is no portion of the Atlantic where these gales are more furious than in the Gulf stream, to the southward of Sable Island.

The current of the Gulf stream, running with great violence against the force of an

JOURNAL OF A PROPOSED VOYAGE FROM NEW YORK TO SOUTHAMPTON—CONTINUED.

Lat.	Course.	Variation.	Mag. course.	Nautical miles.	
39.08	N. 82.30 E.	32.15	E. S. E.	38.80	
39.13	83.15	32.15	S. E. by E. $\frac{1}{2}$ E.	38.70	
39.17	84.	32.15	"	38.60	
39.21	84.45	32.	"	38.50	
39.23 $\frac{1}{2}$	85.30	32.	"	38.40	
39.26 $\frac{1}{2}$	86.50	31.45	S. E. by E. $\frac{1}{2}$ E.	38.30	
39.28 $\frac{1}{2}$	87.10	31.30	"	38.20	
39.30	88.	31.30	"	38.10	
39.31	89.	31.	"	38.	
39.32	East.	30.45	S. E. by E. $\frac{1}{2}$ E.	38.	Maximum latitude.
39.32	"	30.30	"	38.	2,327.13 miles.
39.31	S. 89. E.	30.15	"	38.	2,365.13 miles.
39.30	89.15	29.45	"	38.	
39.29	87.15	29.30	"	38.10	
39.27	86.30	29.	"	38.20	
39.24	85.45	28.30	"	38.30	
39.21	85.	28.	"	38.40	
39.17	84.15	27.45	S. E. by E.	38.50	
39.13	83.30	27.30	"	38.60	
39.09	82.45	27.15	"	38.70	
39.04	82.	26.45	"	38.80	
38.58	81.15	26.30	"	38.90	
38.52	80.30	26.15	"	39.	
38.45	79.45	26.	"	39.25	
38.38	79.	25.30	S. E. $\frac{1}{2}$ E.	39.50	
38.30	78.10	25.	"	39.45	{ Scilly. St. Agnes Light, lon. 6d. 21m.; lat. 49d. 54m.
38.45	N. 87.44 E.	25.	E. N. E.	39.	2,906.83 miles.
38.50.	"	25.	"	39.	
38.15	"	24.30	"	38.	
38.30	"	24.	"	38.	{ St. Aldan's Head, lon. 2d. 5m.; lat. 50d. 33m.
38.40	"	24.	"	17.	Needles' lights.
3,075.82					

BUOYS ON THE LONGSAND HEAD AND KENTISH KNOCK.

As notices have been published with slight inaccuracies, but the following are the correct bearings, LONGSAND HEAD.—A Nun Buoy of large size, painted Black, and surmounted by a $\boxtimes$, bearing a St. Andrew's Cross, with the words "Long Sand" marked thereon, has been placed in 6 $\frac{1}{2}$ fathoms at low water spring tides, and with the following mark and compass bearings, viz:—

1. Nose Tower midway between Walton Hall and the high tree.....N. W. $\frac{1}{2}$ N.
2. Light Vessel.....N. W. by W. $\frac{1}{2}$ W.
3. Kentish Knock Light Vessel.....South.

Note.—The Black Cann Buoy previously at this station, and from which the above-mentioned Nun Buoy bears E. $\frac{1}{2}$ S., distant two cables' lengths, remains for the present, will be taken away after a short time.

KENTISH KNOCK.—Off the South end of the Kentish Knock a large Nun Buoy, colored Red, marked K. K. in large Black Letters, and surmounted by a Staff and Globe, has been placed in 12 fathoms at low water spring tides, with the following compass bearings:—

1. Kentish Knock Light Vessel.....N. E. by E. (distant 7 miles.)
2. Tongue Light Vessel.....W. by S. (distant 10 $\frac{1}{2}$ miles.)
3. North Foreland Light-house, with Broadstairs' Mill a ship's length to the Westward of it.....S. W. $\frac{1}{2}$ S.

Note.—A small Nun Buoy, painted Red, and having K. K. on it in White Letters, has also been laid in 7 fathoms water, three-quarters of a mile N. W. by N. from the re-named large Buoy.

THE LIGHT-HOUSE ON CAPE OTWAY.

The Light-house on Cape Otway, Bass' Straits, lat. 38° 51' S., lon. 143° 29' E., having been completed and lighted on the 29th August, 1848, a Light is burning, and will cease from sunset to sunrise.

The Reef off Cape Otway is one-half to three-quarters of a mile distant, bearing S. E. to S. S. W., and extends $1\frac{1}{2}$ miles Westward.

The Light-house is erected on a cliff 251 feet 6 inches above high water mark. The supporting column is 45 feet high, and the lantern 7 feet high. From high water mark to the center of the light is 300 feet.

The Light is a revolving catoptric of three groups of lamps, each group containing seven lamps; the entire revolves round once in 2 minutes 39 seconds, showing a flash of light of 3 seconds' duration, and 50 seconds of darkness. It is estimated that the light will be seen 8 leagues.

JOURNAL OF BANKING, CURRENCY, AND FINANCE.

STATE MUTUAL LIFE ASSURANCE COMPANY.

THIS company was incorporated by the Legislature of Massachusetts in March, 1844, with a perpetual charter. The principal office is located in Worcester, Massachusetts; upon a plan, as we learn from the prospectus of the company, "by which the expense of insuring lives will be so much reduced below that now charged by any other company in the country, as to induce many, who are now deterred only by the large premiums required by other companies, to provide, in case of death, for the support of their families and connections. Sums from \$1,000 to \$5,000 at a moderate yearly charge, in cash, with the advantage of the additional security offered by a guarantee capital of \$100,000, (for which 7 per cent interest only is paid,) combining the mutual and proprietary plans, now considered here and in Europe as the safest and most desirable of all others—enabling this company to take a *less rate* of interest of premium, and with greater security, than other companies charging higher rates, without the advantage of a guarantee capital, depending solely upon the premiums to meet losses and expenses, which might be insufficient should the loss greatly exceed the general average, before a large fund is accumulated." Such are some of the advantages as set forth in the prospectus quoted. This company commenced issuing policies on the 1st of June, 1845, and in three years and a half have issued 1,900 policies, and received \$82,000 in premiums. The last annual report of the company was made in June, 1848, after the company had been in operation three years, during which time it had issued 1,507 policies. The amount of risks, the amount of deposit notes, the cash deposited, the premiums, and other facts, will more fully appear from the subjoined table:—

	ABSTRACT OF POLICIES.					
	No. of policies.	Amount of risk.	Notes.	Deposits.	Premium.	Paid.
1st year	530	\$900,725	\$8,446 21	\$861 77	\$14,291 94	\$138 00
2d "	489	678,520	2,808 42	688 98	11,417 48	88 00
3d "	538	848,800	3,452 63	879 18	14,567 64	86 00
Total	1,507	\$2,428,045	\$9,707 26	\$2,429 83	\$40,277 06	\$312 00

From the 1,507 policies granted, 128 have expired, been forfeited, or are in the hands of agents, not taken by the assured—reducing the amount at risk, \$221,900, and the number of policies in force to 1,379. The whole amount now at risk is \$2,201,145. Added to the amount of original premiums and deposits, the annual payments on policies and the guarantee capital, gives a total of the receipts of the company since it went into operation of \$184,335 66. This sum does not include the interest on the sums invested.

The occupation of the persons assured are as follows:—312 merchants, 271 mechanics, 84 clergymen, 72 physicians, 145 manufacturers, 36 judges and attorneys, 61

clerks and accountants, 25 carpenters, 30 tailors, 6 surveyors and engineers, 32 inn-holders and provision dealers, 41 teachers, 92 students, 35 farmers, 52 printers, book-sellers, and publishers, 22 shoemakers, 55 females, 8 stable keepers, 2 police officers, 30 cashiers, 13 brokers, 8 agents, 2 weighers and appraisers, 52 various employments.

During the three years, there have been nine deaths of the assured members of the company; their respective occupations, and the amount assured to each is as follows: 1 saddle and harness maker, \$500; 1 clerk in a hotel, \$2,000; 1 auctioneer, \$5,000; 1 merchant, \$1,000; 1 card manufacturer, \$1,000; 1 machinist, \$5,000; 1 clergyman, \$2,000; 1 female, \$1,000; 1 baker, \$5,000; total, \$22,500.

These losses have all been satisfactorily adjusted, and paid without arbitration or litigation; and have no doubt contributed much to the comfort and happiness of the families of the assured. The pecuniary condition of the company at the termination of the three years is as follows:—

RECEIPTS FOR THE THREE YEARS.

Total amount of receipts from premium, &c.....	\$134,335 66
" interest received.....	12,241 77
Total receipts from all sources.....	\$146,577 43

DISBURSEMENTS FOR THE THREE YEARS.

Paid for losses by death of assured members.....	\$22,500 00
Paid dividends on guarantee capital.....	10,500 00
Paid commissions to agents, salaries of officers, books, stationery, fuel, postage, printing, and advertising.....	10,327 07
To this sum should be added the amount premium on policies granted, but not taken.....	6,510 57
Total disbursements.....	\$49,837 64
Balance of cash assets.....	96,739 79
	\$146,577 43

This sum is invested in the following manner:—Loans on mortgages, \$57,050; loans on personal security, \$32,172 69; stock in central bank, \$1,500; cash in the hands of agents, \$4,934 27; cash in the hands of treasurer, \$1,082 83; total, \$96,739 79.

In addition to the cash assets there is another class of assets in the form of deposit notes, which are taken of every person assured in this company as a precautionary measure, to be used in case of great and unexpected mortality. These notes amount to the sum of \$9,707 26, which, added to the cash assets, \$96,739 69, makes the total assets \$106,447 05.

It seems that the Board of Directors, before the company went into operation, carefully and very thoroughly examined all the English tables relative to Life Assurance, and various statistics and data relative to mortality in this country and England, and fixed the rates of premium at a point where they then believed it would be safe, both to the company and the assurer. After three years experience in carefully examining the practical results of the company, the Board are satisfied that the basis upon which they grant policies is safe, both to the assured and the company.

The character of the gentlemen composing the Board of Directors, well known and highly esteemed citizens of Massachusetts, is a sufficient guaranty for the upright management of its affairs. The Hon. John Davis is the President, and the Hon. Isaac Davis and Hon. Stephen Salisbury, Vice-Presidents. Clarendon Harris, Esq., of Worcester, is the Secretary of the company, a gentleman eminently fitted for that office.

COINAGE OF GOLD DOLLARS.

We publish below a correct copy of "*An Act to authorize the coinage of gold dollars and double eagles*," passed near the close of the second session of the 30th Congress, and approved by the President of the United States, March 3, 1849.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That there shall be, from time to time, struck and coined at the mint of the United States, and the branches thereof, conformably in all respects to law, (except that on the reverse of the gold dollar the figure of the eagle shall be omitted,) and conformably in all respects to the standard for gold coins now established by law, coins of gold of the following denominations and values, viz, double eagles, each to be of the value of twenty dollars, or of units, and gold dollars, each to be of the value of one dollar, or unit.

Sec. 2. *And be it further enacted,* That for all sums whatever the double eagle shall be a legal tender for twenty dollars, and the gold dollar shall be a legal tender for one dollar.

Sec. 3. *And be it further enacted,* That all laws now in force in relation to the coins of the United States, and the striking and coining the same, shall, so far as applicable, have full force and effect in relation to the coins herein authorized, whether the said laws are penal or otherwise; and whether they are for preventing counterfeiting or debasement, for protecting the currency, for regulating and guarding the process of striking and coining, and the preparations therefor, or for the security of the coin, or for any other purpose.

Sec. 4. *And be it further enacted,* That in adjusting the weights of gold coins henceforward, the following deviations from the standard weight shall not be exceeded in any of the single pieces—namely, in the double eagle, the eagle, and the half eagle, one half of a grain, and in the quarter eagle and gold dollar, one quarter of a grain; and that, in weighing a large number of pieces together, when delivered from the chief coiner to the treasurer, and from the treasurer to the depositories, the deviation from the standard weight shall not exceed three pennyweights in one thousand double eagles; two pennyweights in one thousand eagles; one and one-half pennyweights in one thousand half eagles; one pennyweight in one thousand quarter eagles; and one half of a pennyweight in one thousand gold dollars.

LIABILITIES AND ASSETS OF BANKS IN OHIO.

There are fifty-four banks in Ohio; namely, eleven independent banks, thirty-eight branches of the State Bank, and five old banks. The following are the assets and liabilities of these institutions, as shown by their statements to the Auditor of State on the first Monday of February:—

ASSETS.		LIABILITIES.	
Discounts.....	\$14,912,665	Capital stock.....	\$6,584,330
Gold and silver.....	3,155,362	Circulation.....	9,491,037
Notes of other banks.....	1,224,025	Safety Fund.....	1,134,257
Due from banks.....	655,186	Due to banks.....	1,396,462
Eastern deposits.....	1,462,097	Due to depositors.....	4,567,783
Checks and cash items.....	28,503	Contingent fund.....	423,950
Bonds with State Treasurer.....	1,872,785	Bills payable.....	211,140
Real estate, &c.....	332,812	Discounts, &c.....	273,580
Other resources.....	434,277	Dividends unpaid.....	25,006
Total resources.....	\$24,177,716	Other liabilities.....	74,117
		Total liabilities.....	\$24,177,716

THE FRENCH FUNDS.

In the year of grace, 1805, before the battle of Austerlitz, the public (French) funds stood at 61 francs. On the arrival of the news of that great victory they fell to 59 francs 80 centimes. A glorious peace raised them to 60 francs 60 centimes.

Before the birth of the king of Rome (20 April, 1811,) the price was 81 francs 50 centimes. The day following that event the price fell to 78 francs 75 centimes.

In 1814, before the fall of the Emperor Napoleon, the funds stood at 45 francs 25 centimes. After the entrance of the allied armies into Paris they rose to 49 francs 50 centimes. A provisional government was appointed, and they rose to 52 francs. The deposition of the emperor was decreed and they rose to 55 francs 75 centimes. His abdication raised them to 63 francs 50 centimes.

In 1815, before the landing of the ex-emperor at Calne, the funds stood at 64 francs 61 centimes. On the news of his arrival they fell to 77 francs 60 centimes. After his re-entry into Paris they stood at 73 francs. He set out for the army, encouraged by a fall to 54 francs 75 centimes. He gained the battle of Ligny, and they declined to 53 francs 50 centimes. Yet after the disaster at Waterloo, they rose to 59 francs 75 centimes.

On the second abdication of the emperor, and the re-entrance of the allied armies, the funds rose to 61 francs. So that, in point of fact, the price of stocks was lower, by 1 franc 20 centimes, after the battle of Austerlitz, than after the re-entrance of the allied armies into Paris.—*La Presse*.

There is every promise that the monetary history of 1849 will prove as fertile in singular events as the two years just passed, and such as will differ from both as widely as those have differed from each other. The commencement of a new era in France, the final development of our free trade in grain, and many other causes, are sufficient to insure this. If, however, a new element, such as could never have entered the mind in its wildest guesses, had been wanted to make us look to the future with lively wonder, nothing could have been presented more calculated to do so, or more curious as a termination of all the broad and heterogeneous occurrences we have recently witnessed, than the discovery of the gold mines of California.—*The London Times*.

MERCANTILE MISCELLANIES.

GUNDRY'S CINCINNATI MERCANTILE COLLEGE.

Of all the many schools, academies, and other institutions of learning in our large commercial cities, Cincinnati is alone in the possession of a purely mercantile academy or college. We mean by this a place where young men, intending to adopt the mercantile profession, are able to devote their whole time to the study of those branches of knowledge particularly applicable to all the exigencies of a business life, either in the management of a wide commerce, the counting-house, and the bank or other moneyed institutions. The institution at Cincinnati, under the control of Mr. Gundry, is of that description; and here it should be remarked, that *commercial law* was unknown in schools for the education of young men preparing to enter the marts of trade previous to its introduction by that gentleman. It is a new feature, and will contribute, in an essential degree, to elevate the system of commercial instruction, and we are gratified to learn that it has "met the unanimous approval of business men in Cincinnati." The success of this, which, although a pioneer, may be regarded as a model institution, will, we trust, lead to the establishment of similar schools in all our large commercial cities and towns. Mr. Gundry is an accomplished lawyer, having studied that profession regularly, and been admitted to the Cincinnati Bar; and although he has been, and will continue to be, the regular lecturer in law in the institution, and rightly claims some advantage in that capacity, he at the same time avails himself of the talents and experience of some of the most eminent practicing attorneys and counsellors in Ohio. At this institution instruction is given individually, so that each may progress in the ratio of capacity. In addition to the regular lectures in law, it is the practice in this institution to devote one hour daily in critical interrogations on the various matters connected with the routine of business and of keeping books. The course of instruction not only presents the theory and practice of book-keeping as a science, but embraces information selected from various sources with reference to active prac-

tice; and in short, whatever is considered important, useful, and worthy of adoption, to enable the student to take charge of, and keep with success, double entry books of every description. Mr. Gundry, the principal, has now been engaged more than eight years in teaching, and the result of his labors is to be found in the testimonials of a large number of young men, now employed in book-keeping in mercantile houses either in Cincinnati or other cities, or successfully engaged in transacting mercantile business on their own account. These all unite, as we notice by the last annual report of this institution, in acknowledging their obligations to it, and at the same time in commending the system to the public.

THE VALUE OF A CLERKSHIP IN NEW YORK.

One of the editors of the *Day-Book*, formerly a practical merchant, and one who has had some experience as a merchant's clerk, reads a homily to young men anxious to "get into business for themselves and become rich," well worth remembering:—

There are but few clerks who have any idea of the value of a clerkship in a New York jobbing house. Most of them look upon it as worthless, as far as mere salary is concerned, and content themselves with their situations only because they suppose that in a few years they will be able to get into business for themselves, and become rich, and be, in a measure, compensated for their past services. There are not, probably, ten clerks in New York who think they are doing better on the small salary they are receiving than they ever will do in business for themselves. And there are not ten who ever will do half as well in business for themselves as they are doing with their salary. During the last twelve years the writer has been acquainted with more than four hundred dry goods clerks in this city; he cannot find ten of the number now in successful business. One in fifty is a fair estimate of the number of clerks that succeed in business for themselves. A clerk who will commence on a salary of \$600 a year at the age of twenty-one, with a merchant having a capital of \$20,000, and save out of his salary \$200 a year, and lend it to his employer at 7 per cent on his note at six months—add the interest to the principal when the note is paid—and lend it again, and so receiving his interest semi-annually and reinvesting it—will, at the age of forty, have possessed himself of all his employer's capital, and a large share of his profits. With the exception of the retail dry goods business, there is not one that holds out less encouragement to clerks than the jobbing business. The salaries of the clerks are all that there is about the business worth having; and the clerks, as a class, get more than three-quarters of all the money there is made in the business. Country boys, who come to New York to get situations in stores, make very great mistakes. They had better learn a trade, or stick to the farm. Most of them are too proud to be tailors, or carpenters, or builders, or printers; only a few will take a situation in a book store, or music store, or furniture store, or any of the various manufacturing establishments about the city. Nothing will do but a wholesale dry goods store. Into these they crowd year after year, where those who are not ruined by dissipation, waste five or six years of their lives in learning a business, and then return to some profitable employment in the country, or go to California. The young man who goes into a dry goods store with any other view of making money than that of saving it from his salary, makes a mistake that will cost him the best part of a lifetime to get over. Better learn a trade, boys, a good deal. You won't believe it now, but you will before you are ten years older; then "make a note on't."

BOOK AUCTIONS IN LONDON.

A late number of the *Literary World* contains an interesting letter from Dr. Joseph Cogswell, the agent of the trustees of the Astor Library. We extract from it Mr. Cogswell's description of book auctions in London, the only portion of the letter that properly falls within the scope of the *Merchants' Magazine*:—

"The sale of the Stowe Library, during my stay in London, has afforded me a fine opportunity for learning the booksellers' estimate of the value of books, particularly of the more important ones. These sales, as you doubtless know, are attended prin-

cipally by booksellers, and it is rare that they allow a book to be sold for less than two-thirds of its shop price, unless it is one that is wholly decried. It would surprise a person who has been accustomed to see the crowds which attend our common New York book sales, to find how few are present at a London sale, even an important one like that of the duke, which is now going on. I have attended regularly, and never seen a company of more than sixty, generally about half that number, and everything is done so quietly here, there is some comfort witnessing the execution—no noise, no bustle, and rarely any disputing about who bids off the book. A table, some ten or twelve feet in length, is placed at the foot of the auctioneer's desk, around which the buyers sit or stand as they prefer; the books, as they are led out to the sacrifice, are placed on the table for inspection, and an offer being made in an ordinary tone of voice, the auctioneer takes it up in the same tone, repeating the bids pretty much in this way:—A pound—a guinea—two and twenty shillings—three and twenty—four and twenty—shall I say once more for you—five and twenty shillings; are you all done, &c., and a tap with his little ivory hammer gives notice that the victim is guillotined; and then another is brought to the block. Little or nothing is said by the auctioneer in commendation of his wares; he presumes that the by-standers know what they come for, and allows them to act for themselves. They sell more rapidly than is done with us, at the same time a fairer opportunity is given to see the books at the time of the sale, besides the exposition for a day at least before. In another respect the usage is different, the bids are made for the lot and not per volume, as with us, and where the books are of no great value, fifteen or twenty volumes are put up in a lot; but, whether valuable or not, they are never sold by the volume. Sotheby's salesroom is a fine school for a book buyer; he may learn more there in a few hours than he could in any other way in as many weeks. I say Sotheby, because his is the largest salesroom. There are many others to which the remark would almost equally apply."

THE BOOK TRADE.

- 1.—*Nineveh and its Remains; with an account of a Visit to the Chaldean Christians of Kurdistan, and the Jesidis, or Devil Worshippers; and an inquiry into the Manners and Arts of the Ancient Assyrians.* By AUGUSTEN HENRY LAYARD, Esq., D. O. L. 2 vols. 8vo. pp. 326, 373. New York: George P. Putnam.

No work of research or travel produced during the present century, perhaps, has attracted so large a share of the notice of the learned, or afforded higher evidence of the learning, industry, research, and we may add in this branch of literature, of the genius of the author. It is, as the learned Dr. Robinson remarks, "a work of very high interest and importance, and is destined to work an epoch in the wonderful progress of knowledge at the present day," which, considering the achievements in research, discovery, and almost every department of science, is no mean compliment. The volumes before us contain an account of the author's labors carried on by him at Nimroud from November, 1845, until April, 1847; and as has been truly said, the narrative is like a romance. "In its incidents and descriptions," we quote again from Dr. Robinson, "it reminds one continually of an Arabian tale of wonders and genii. The style is simple and direct, without ornament and without effort; yet lively, vigorous, and graphic. Mr. Layard encountered many difficulties with Pashas and Sheikhs, Cadis and Ulemas, with Arabs of the plains and Chaldeans of the mountains, in molding them for the accomplishment of his great purpose; an evidence of the genius and energy of the man. These are amusing and described with effect. "In this way the work presents us with a better insight into oriental character, and manners, and customs, than is often to be found in volumes expressly devoted to these topics." The energy, skill, and perseverance everywhere displayed by Mr. Layard, as also his singular tact and judgment in the management of the Arabs, is truly remarkable. The work is copiously illustrated with plans and drawings, and is altogether the most beautiful and costly production of the American press that we have ever seen. We regret that our limited space will not permit us to give a more elaborate notice of the present volumes; our regret is somewhat mitigated, however, by the fact, that all the leading reviews and journals have elaborately described and deservedly eulogized the work. Great credit is due to Mr. Putnam for the taste and liberality displayed, not only in the republication of this great work, but for the uniformly elegant and finished style which characterizes every work he has thus far published.

2.—*Mardi: and a Voyage thither.* By HERMAN MELVILLE. 2 vols. 12mo. New York: Harper & Brothers.

This is the title of a work just published by the Harpers, and issued in their usual neat and handsome style. It is one which we can conscientiously commend to the attention of every reader. The author is Herman Melville, who has twice before been before the public in the pages of those charming narratives "Typee" and "Omoo." The recollection of the thrill of pleasure with which they were first read will, we hope, lead to the general reader's further acquaintance with the original mind of their gifted author. The volumes will more than fully repay a careful perusal. The style is unique and cannot be described. It is peculiarly the author's own. He has started a new track and disdains the beaten path. The language possesses all the polish of an Irving with all the spirit of a Scott. The matter is truly poetical—philosophical as Plato, yet beautifully imaginative as Moore; the treatment thoroughly dramatic. As a whole, it is a master stroke of genius.

3.—*History of Queen Elisabeth.* By JACOB ABBOTT. With engravings. New York: Harper & Brothers.

In this admirable series of histories, the author confines himself, in the most minute details which he records, to historic truth; at least as far as that is to be obtained from the most authentic records of the past. The pledge that Mr. Abbott, in the introduction to the present volume, gives, that truth and nothing but the truth, so far as an honest purpose and a careful examination has been effectual in ascertaining it, will be taken for its true value by all who know the unimpeachable character of that gentleman.

4.—*The Shaksperian Reader: a Collection of the most approved Plays of Shakspeare; carefully revised, with Introductory and Explanatory Notes, and a Memoir of the Author. Prepared expressly for the use of Classes and the Family Reading Circle.* By JOHN W. S. HOWS, Professor of Elocution in Columbia College. New York: D. Appleton & Co.

The passion for Shakspeare, if we may judge from the crowds that are gathered to hear that gifted woman, Fanny Kemble Butler, read his plays, or to listen to the ingenious lectures of Dana, is increasing. The present volume, as well as that of the "Family Shakspeare" of Bowdler, in which the indelicate expressions of the text are omitted, may be taken perhaps as another evidence of the fact. At all events, Professor Hows has prepared a very interesting collection of the most popular plays, and skillfully arranged them for school reading; and his brief and pertinent notes render his collection, in our opinion, well adapted to the purposes for which it was intended, as expressed in the title-page at the head of this notice. We commend it to the attention of our schools and colleges, besides recommending it as a most desirable book for the social circle.

5.—*Narrative of the late Expedition to the Dead Sea. From a Diary by one of the Party.* Edited by EDWARD P. MONTAGUX, attached to the United States Expedition ship Supply, etc. Illustrated with a Map of the Holy Land, etc. 12mo. pp. 224. Philadelphia: Cary & Hart.

The present volume embraces a diary, which appears to have been commenced at the time of the sailing of the expedition from New York in November, 1847, till the return of the same in December, 1848, of "the most interesting incidents which occurred on sea and on land; of storms, calms, adventures, and interviews; of researches and experiments, of difficulties and successes." It is not without interest; and if the reader should be disappointed in its perusal, he will have no right to complain, as the author makes no very pompous pretensions.

6.—*Household Education.* By HARRIET MARTINEAU, author of "Eastern Life," etc. Philadelphia: Lea & Blanchard.

Portions of this work were originally prepared and published in the *People's Journal*; a change in the publication of that work suspended the continuance of the series; but Miss Martineau, in the present volume, finishes the work, and it now forms a complete treatise on the subject of Household Education. A more valuable and instructive work, or one better calculated to promote the objects of home, the most important kind of education, has never emanated from that sensible and intelligent woman's pen. It should be in the hands, and its contents carefully "learned, marked, and digested" by every mother who speaks the English language.

7.—*Rural Letters, and other Records of Thought at Leisure, written at intervals of more hurried Literary Labor.* By N. PARKER WILLIS. 12mo. pp. 380. New York: Baker & Scribner.

This volume contains "Letters from under a Bridge," "Open Air Musings in the City," "Invalid Rambles in Germany," "Letters from Watering Places," &c. The "Letters from under a Bridge" were written while the author was residing at his beautiful Glenmary, near Owego, and were originally published in the *New York Mirror*, and afterwards collected and published in a volume, which is now out of print. Although all the letters, &c., contained in this collection have been published either in the *Home Journal*, or some other magazine or journal, with the exception of the first-named collection, but few of them have been brought together in the more durable form of a book. Mr. Willis is exceedingly happy in his selection of titles, as all who read the "thoughts of leisure" will feel. His style is as beautiful as it is fresh and original. In all but the historian, Mr. Willis is unsurpassed by any American writer. His style is as artistic, and he has more versatility and genius than Washington Irving. The luxurious delicacy of his descriptions alike astonish and delight us. The everyday, newspaper paragraph that falls from his pen, possesses in itself an element of perpetuity; and we should regret to see so many gems thrown off for the ephemeral "foho of four," were we not quite sure that every line would appear in a more durable form. He has never published a line, that, dying, he should wish to blot.

8.—*Living Orators of America.* By E. L. MAGOON, author of "Proverbs for the People," "Orators of the American Revolution," &c. 12mo. pp. 462. New York: Baker & Scribner.

We noticed, in a former number of this Magazine, the publication of the "*Orators of the American Revolution*," from the same gifted pen, in terms of high but deserved commendation. The present work, on the same plan, is devoted to "Living Orators of America," and includes in its table of contents nine prominent names, each designed to illustrate a distinguishing characteristic, as will be inferred from Mr. Magoon's classification, as follows:—Daniel Webster, the Logician; Edward Everett, the Rhetorician; Henry Clay, the Politician; John C. Calhoun, the Metaphysician; George McDuffie, the Impetuous; Lewis Cass, the Courteous; Thomas H. Benton, the Magisterial; William C. Preston, the Inspired Declaimer; and Thomas Corwin, the Natural Orator. Catching the strong points, or marked features of each orator, the author illustrates, in a series of graphic and glowing portraiture, the peculiar features of the several distinguished personages with great impartiality, and in all of whom he recognises much to admire. In connection with the work referred to above, the present forms a circle of oratorical models, "each one in his own individuality standing for a class, nearly approximating perfection of its kind, and in the aggregate presenting an array of exalted worthies whom the best talents would do well to emulate, and whom the loftiest genius can only, by the most strenuous efforts, hope to excel." This volume, like all that comes from the same enterprising publishers, is handsomely printed, and illustrated with good likenesses of the several orators included in the catalogue enumerated above.

9.—*A Book of the Hudson.* Collected from the various works of Diedrich Knickerbocker. Edited by GEOFFREY CRAYON. 16mo. pp. 215. New York: George P. Putnam.

We published, some fifteen years ago, a little work entitled "Letters about the Hudson," containing just about as much matter, and in precisely the same form; but here the resemblance closes, and we pray no one who reads this notice to refer to that book, for although at the time it was commended by the press, as containing a "vast amount of statistical and other valuable information," we are quite ashamed of its literary execution now; but if that volume should have been the means of suggesting to the mind of Washington Irving the idea of preparing the present volume, our labor was not in vain. The legends and traditions in existence have hitherto, as we learn from Mr. Irving's introduction to his "Book of the Hudson," been published in a scattered state, in his various miscellaneous works, and mixed up with other writings; these Mr. Irving has collected in one volume, embracing, of course, "all that he had written concerning the river which he loved so well." Their publication in the present form is, we conceive, a happy idea, as it cannot fail of forming "an agreeable and instructive hand-book to all intelligent travelers about to explore the wonders and beauties of the Hudson."

- 10.—*Manual of the Corporation of the City of New York for the year 1849.* By D. T. VALENTINE. New York: McSpedon & Baker, Printers.

This useful manual for the present year has been greatly enlarged, and improved in every respect, forming altogether a beautifully printed volume of nearly five hundred duodecimo pages. It embraces an almanac for the year 1849, the charter of the city, and all the laws and regulations pertaining to the several departments of the city government, with complete lists of all the officers, past and present; with similar information in regard to the various philanthropic and other institutions of New York. Several maps, charts, and engravings, illustrative of the past and present condition of the city, are introduced; and there is besides a vast amount of historical information, with interesting documents relating to the early settlement and history of the island. Time and space would fail us in the mere enumeration of the varied contents of this useful manual. Our only object in noticing it in this place, is to induce the public to examine it, which will give a better idea of its contents and value than we can do in the space allotted for a notice. It reflects great credit to the research, care, and industry of the accomplished compiler, Mr. Valentine, whose experience in the capacity of Clerk to the Common Council has afforded him facilities for the compilation of the work that we should look for in vain in any other quarter. It is authentic and reliable.

- 11.—*The Rose: its History, Poetry, Culture, and Classification.* By S. B. PARSONS. 8vo. pp. 280. New York: John Wiley.

This is a new edition of a work published a year or two since, with a very important addition of some fifty pages, embracing a full descriptive list of Roses, appropriately, and we presume scientifically classified. The first part of the volume is devoted to the history of the Rose; the second to its Poetry; embracing almost every poem of almost every poet whose inspiration has been derived from its contemplation. While the history and poetry of the rose will serve to interest the general reader and the student of nature, the culture and classification of it in the two last parts of the work will be found useful if not absolutely necessary to the practical florist. Mr. Parsons, the author, is the proprietor of a Commercial Garden and Nursery at Flushing, L. I., in the State of New York, and, it is fair to presume, understands the practical part of the subject.

- 12.—*Select Christian Authors, with Introductory Essays.* 2 vols. 8vo. New York: Robert Carter & Brothers.

These two volumes form quite a library of standard works of a religious character, embracing many well known and widely circulated productions, besides some that are quite rare and scarcely attainable in any other form. The two volumes include the following works:—Leslie's Short and Easy Method with Deists; Lyttelton's Observations on St. Paul; Doddridge's Evidences of Christianity; Bates on the Divinity of the Christian Religion; Owen on the Self-Evidencing Light of Scripture; Bassler on the Danger of Making Light of Christ; Memoirs of Rev. T. Halyburton; Wilberforce's Practical Views of Christianity; Doddridge's Rise and Progress of Religion in the Soul; Adams' Private Thoughts on Religion; Ken's Redeemer's Tears Wept over Lost Souls; A Kempis' Imitation of Christ. Each work is prepared with an elaborate introductory essay, contributed by eminent divines, among whom we notice the names of Dr. Chalmers; Rev. D. Young, D. D.; Rev. Daniel Wilson, D. D.; Rev. Robert Jordon, D. D.; and the late John Foster, one of the ablest of English essayists. It would be difficult to obtain so large a mass of the popular theology in a form so compact, for the family library of almost every Christian denomination, for so small an outlay, the price of the complete work being only two dollars.

- 13.—*Gospel Sonnets: or, Spiritual Songs. In Six Parts.* By the late Rev. Mr. RAULS ERAKINE, Minister of the Gospel at Dumfries. In which is now prefixed an account of the Author's Life and Writings. New York: Robert Carter & Brothers.

The author of this volume flourished in the seventeenth century, and of course his poems bear, in their quaintness at least, the impress of that period. And although there is more of the religion of his time in them than there is of the poetry of a later day, the work will find many admirers in our own time. The poems are all based upon the "law and the Gospel," and are prefaced with innumerable references to sacred writ. The last poem in the volume, "Smoking Spiritualized," inserted, as we learn from a note, as a proper subject for meditation to smokers of tobacco, reminds us of a beautiful poem by Sprague, on the "Segar." Both commend smoking, a practice which some persons of a less popular faith, in our day, denounce in no measured terms.

- 14.—*An Autobiography and Letters of the Author of "The Listener," "Christian Law,"* etc. 12mo. pp. 346. Philadelphia: J. W. Moore.

Biography is our favorite reading, and especially autobiography, as it affords us a clue to the inmost recesses of the human heart, especially when it is written without the remote idea of future publication. The present volume contains the memoranda of the most important part of the life of this eminently pious woman, whose writings are exceedingly popular with a large class of evangelical Christians of different denominations. The account given of the author's birth and childhood, as well as that of her early youth, is replete with just that kind of interest that imparts a value to such productions.

- 15.—*Autoria; or, Anecdotes of an Enterprise beyond the Rocky Mountains.* By WASHINGTON IRVING. Author's Revised Edition. Complete in one volume. New York: George P. Putnam.

Another of the volumes of Mr. Putnam's beautiful edition of the writings of Washington Irving has made its appearance since our last number. To do more than announce the continuance of the series, is unnecessary. The twelve volumes, when completed, with, probably, the author's last revision, will form the handsomest edition of any American author's works ever published in this country.

- 16.—*Essays and Reviews; or Scenes and Characters.* Being a selection of the most eloquent passages from the writings of THOMAS BABINGTON MACAULAY, author of the "History of England." New American edition. 18mo. pp. 214. Buffalo: George H. Derby & Co.

Those who cannot find time to read the numerous reviews and essays of Macaulay, as embraced in several volumes of his miscellanies, will find this a very agreeable and withal instructive work. The passages, in a measure complete, are selected with taste and judgment; and are generally such as would strike the most superficial reader for their grace and beauty as compositions, as well as for the interest of the subjects discussed.

- 17.—*Rural Sports; a Tale in Four Parts.* By J. B. JONES. Philadelphia: Charles Marshall.

Mr. Jones, it will be recollected, was the editor of the *Madisonian* during Mr. Tyler's administration; and, although not practiced in the art of political penmanship, was nevertheless a very clever newspaper paragraphist. The present publication exhibits his genius in a new light—that of the poet; and, although critics would undoubtedly find much to carp at, we are free to say that his "Rural Sports," in verse, display a talent for that department of literature, not inferior to some writers of higher pretensions. His versification is graceful, and his easy and flowing description of natural objects pleasing. We hope to hear from him again in the same line of literary effort.

- 18.—*Guide to the Temple of Time, and Universal History for Schools.* By EMMA WILLARD. New York: A. S. Barnes & Co.

The method of pointer-teaching is here circumstantially explained, not only according to long experience and the examination of different schools in our own country, but with an attention to what has, in this respect, been done abroad. An examination of this admirable manual will convince the most superficial observer of its great merits; besides, Mrs. Willard's success in this department of literature, is a sufficient guarantee of its value.

- 19.—*The Poetical Works of Martin Farquhar Tupper; including Proverbial Philosophy, a Thousand Lines, Hactenus, Geraldine, and other Poems.* New York: John Wiley.

A beautiful edition of the complete poetical works of the popular author of *Proverbial Philosophy*, including that store-house of wisdom, which is worth the price of the volume; and more, were it unattainable in any other form.

- 20.—*The Count of Monte-Christo.* By ALEXANDER DUMAS. New York: Stringer & Townsend.

A new edition of this popular novel, forming one large octavo volume of about five hundred pages, with all the illustrations of Valentin, has recently been published by Stringer & Townsend.

21.—*The Poetical Works of Lord Byron. With Notes.* Illustrated with numerous Engravings. London and New York: George Virtue.

It is too late in the day to speak, in a brief notice, of the poetical writings of one whose fame is as world-wide as that of Lord Byron. We can, therefore, only allude to the edition, the first part of which is before us, and a very beautiful specimen of typography it is, with three fine steel engravings embracing a portrait of the noble lord, the Corsair's Isle, and Lord Byron contemplating the Ruins of Rome.

22.—*Sharp's London Magazine.*

George Virtue has sent us the first number of the new volume of this popular miscellany. It contains sixty-four pages of original matter or choice selections. There is a capital criticism on "Shakespeare's Individuality in his Characters," by Mary Cowden Clarke, the accomplished author of the *Concordance of the great dramatist*; and an article on "Penal Economy," which we commend to the attention of the friends of prison and penal reform. The number for March has two illustrations, namely, "Brittany" and "Lord Ullin's Daughter."

23.—*Mordaunt Hall; or, a September Night. A Novel.* By the Author of "Two Old Men's Tales," "The Triumphs of Time," "Emilia Wyndham," etc. New York: Harpers' Library of Select Novels.

We have not found time to read this novel; but if it is equal to the previous productions of the same clever novelist, it will not want purchasers or readers.

24.—*The Boy of Mount Rhigi. "Do the Duty nearest to You."* By the author of "Redwood," "Poor Rich Man," "Home," etc. Boston: Wm. Crosby & H. Nichols.

This history, says Miss Sedgwick, has been written to awaken, in those of our young people who have been carefully nurtured, a sense of their duty to those who are less favored; to show them that the ignorant, neglected, and apparently vicious, have the gems of goodness in their souls; that patience, kindness, and affection will fall like holy dew upon them, nourishing that which God has planted! A noble design, truly and beautifully enforced by the author, in the interesting and instructive narrative of the poor "Boy of Mount Rhigi," and his friend, "Harry Davis."

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[35] We cannot resist the temptation of publishing in this place the following letters from two of our most distinguished statesmen. As we seldom devote any portion of our Journal to such matters, we trust our readers will indulge us in an occasional deviation from the rule.

LETTER FROM THE HON. THOMAS H. BENTON, UNITED STATES SENATOR FROM MISSOURI.

WASHINGTON CITY, April 20, 1849.

MR. FREEMAN HUNT, SIR,—I owe you many thanks for the opportunities that I have had to read the *Merchants' Magazine*, and have found in reality to be a magazine, and that well replenished, of all the useful matter which the title would imply, and presented with a fullness and clearness which delights while it instructs. It is in fact a *merchants' magazine* in the large acceptation of the term—merchants who go between nations—whose large operations bring many departments of knowledge, and a view of the state of the world, into daily requisition. But it is not the great merchant only, but the one of more modest, but, nevertheless, of most useful operations—the merchant of the interior also—who will find this magazine to abound with the information the pursuit of his business, and the elevation of the mercantile character requires. Nor is its utility at all confined to merchants, but extends to the legislator and diplomatist, and to all who are charged with managing the affairs of a nation. For myself, I have found it most useful to me in my senatorial labors, and have been in the habit, for many years, of carefully consulting it. Very respectfully, sir, your obedient servant.

THOMAS H. BENTON.

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LETTER FROM EX-GOVERNOR WILLIAM H. SEWARD, UNITED STATES SENATOR FROM NEW YORK.

WASHINGTON, March 27, 1848.

MY DEAR SIR:—Have the goodness to place my name on your list of subscribers for the *Merchants' Magazine*. I regard it as an invaluable work for the use of all who would understand, not merely commercial operations in this extending country, but the social and economical questions involved in the administration of the government. I am, with great respect, your humble servant,

FREEMAN HUNT, Esq., Ed. *Merchants' Magazine*.

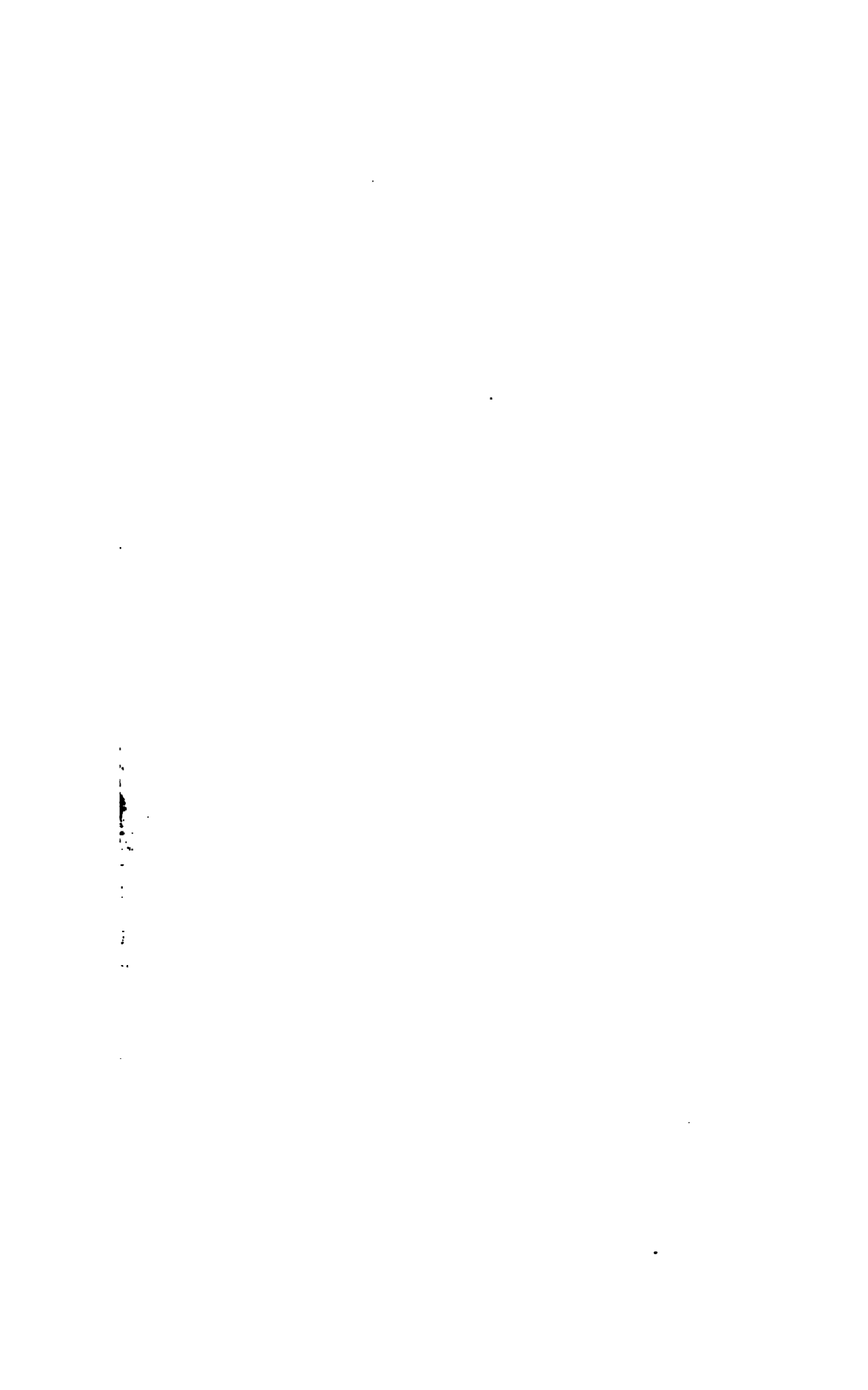
WILLIAM H. SEWARD.



Thomas F. Kettell

Engraved by T. Deney for Handy Merchants Magazine

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BY FREEMAN HUNT, EDITOR AND PROPRIETOR.

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HUNT'S
MERCHANTS' MAGAZINE
AND
COMMERCIAL REVIEW.

JUNE, 1849.

Art. I.—BANKING IN INDIA.*

AMONG the numerous colonies of Great Britain, there are none at this moment more important, or contemplated with more interest by men of all classes and opinions, than her possessions in India. That vast territory which has been the theater of so many brilliant exploits in war, and the harvest field of the most princely fortunes, is still the region upon which the attention of merchants, philosophers, political economists, and statesmen, is turned with the most hopeful anxiety. Under her native princes, celebrated for their immense wealth, and under the dynasty of her Tartar lords, the territory of India was covered with splendid cities, her provinces intersected by large canals, her plains enriched by agriculture. Temples and monuments of great architectural beauty were erected as the trophies, and still remain as the memorials of art. Although at the period of British ascendancy India labored under many disadvantages from the merciless and profligate character of her native princes, and the invasions of hostile tribes, it is beyond all question that under these very native princes she had attained to great wealth, power, and distinction. From that period, however, her political position and commercial character have undergone important changes. The gradual extension and firm establishment of the British power has completely altered

* The following original paper, contributed to our Magazine by the writer, G. M. BELL, Esq., Banker, of England, will be read with interest. Mr. Bell is regarded in England as one of her best writers on practical banking, and for several years wrote the banking articles in the *Atlas* newspaper. He is also the author of several volumes on banking, among which may be named the "Philosophy of Joint Stock Banking," published in London by Longman, Orme, Brown, & Co. in 1840; "The Currency Question; an Examination of the Evidence on Banks of Issue, given before the Select Committee of the House of Commons in 1840," &c., published in 1841; "The Country Banks and the Currency; an Examination of the Evidence on Banks of Issue," &c., published in 1842, &c. Mr. Bell has for some time past been engaged on a Banking Dictionary, on the plan of McCulloch's Commercial Dictionary, which will of course embrace Banking in all its aspects and bearings throughout the whole commercial world. We shall probably take occasion, in a future number of our Journal, to refer to the writings of Mr. Bell more fully, reviewing his new work at some length on its appearance.—*Ed. Mer. Mag.*

the political relations of the East, and opened out new sources of wealth to the commercial industry of her enterprising sons.

A valuable trade with India was long exclusively enjoyed by the East India Company. Since the abolition of their monopoly, however, the field of commerce has been gradually and beneficially enlarged. Those eastern possessions afford to Great Britain the prospect of a daily extending, permanent, and valuable market for supplies of the greatest variety. Sugar is a rapidly increasing product of India, and the great quantity of wool imported thence by England affords a strong inducement for encouraging the growth of that article. The exportation of skins, hides, and castor oil, has also greatly increased. With the linseed imported from India, the cattle upon the wolds of Yorkshire and many other parts of England are now fed. Indian tallow is considered equal in quality to the best imported from Russia. The importation of hemp and tobacco from India has also increased, as well as of pepper and spices, which are in an especial manner the production of the East. Rice is exported in abundance. Wheat is one of the productions of India that has only been recently imported into Britain; but it has been supposed that by properly encouraging the trade, England might obtain supplies of this essential article of subsistence sufficient to render her independent of foreign countries. Cotton and silk are also among the productions and manufactures of India. This brief enumeration is sufficient to indicate the immense importance of India to Great Britain, leaving political considerations entirely out of the question.

In 1832 the extent of territory in India under the British government was 553,000 square miles, the population of which was 83,000,000.

At the same period the extent of territory in India under the British government, and including the allies and tributaries to Great Britain, was 1,280,000 square miles, the population of which was 134,000,000.

At the same period India, beyond the Ganges, extended to 77,000 square miles, the population of which was 301,000.

The total imports from India to Great Britain, eastward of the Cape, and excluding China, in 1832, were £6,337,098.

The total exports from Great Britain to India at the same date were £3,750,286.

Both the population and the trade of India have increased very considerably since that time, and to her territorial possessions in the East, Great Britain has since added the extensive region of Scinde, a country larger than Ireland, being 400 miles in length and 300 in breadth.

Taking into account its situation, and the variety and value of its productions and manufactures, there is perhaps no part of the world better adapted for extensive and valuable trade than British India. It comprises 250,000 square miles of the richest and most fertile portions of the globe, with at least an equal extent of productive soil in the tropical and temperate zones. The sea-coast extends 1,500 miles, and possesses various excellent harbors, while the country is intersected with the magnificent rivers Ganges, Burrampooter, and Indus. This vast empire is surrounded by the extensive and fertile countries of China, Birmah, Siam, Persia, Arabia, and the Eastern Archipelago.

The amount of maritime trade connected with British India was a few years ago estimated at £30,000,000. The whole amount of British manufactures exported from the United Kingdom to all parts of the world is about £50,000,000 sterling annually. If the population of the British territories

in the East were enabled to consume only one-tenth of the quantity consumed by the negro subjects of Great Britain in the West Indies, it has been presumed that there might be an annual export trade of £72,000,000 added to the present total exports of £50,000,000.

Without entering into more minute particulars, it is obvious from these statements that British India presents an extensive, valuable, and encouraging field for commercial enterprise, and for the legitimate investment of British capital. Yet with all her vast capabilities, and the immense wealth that Britain might derive from her extensive possessions in the East, India is represented as a poor country,—not poor in natural resources, but poor in the means and appliances necessary for turning those natural resources, and her great elementary wealth, to profitable account. The evidences of this poverty are alleged to have been sufficiently exhibited “in the destructive famines that have decimated the population; in the trifling amount of revenue, (three shillings per head per annum,) derived with the greatest difficulty by the State; and the small quantity of maritime trade carried on by the people themselves, or by the ruling power, (the consumption of British manufactures being less than sixpence per head yearly,) and in the poverty of the great mass of the cultivators and occupiers of the soil, who live from hand to mouth, borrowing at the rate of 50 per cent interest to purchase seed corn, from which sustenance is expected for the coming year.”

When Britain first obtained possession of India, every nabob, whatever his rank, had his own mint, issued his own coins, and regulated the affairs of his treasury with reference alone to his own necessities, and without regard to any variations in the value of the currency. That system is now abolished. Mints are established only at Calcutta, Madras, and Bombay. The rupee is of the same value over the whole of India. It is composed of eleven-twelfths silver, and one-twelfth alloy, and weighs 180 grains troy. The British Indian government made silver the standard of value. The silver rupee, now the legal tender of India, is of the value of two shillings sterling. Gold is at an agio, and left to find its own value. The general circulating medium of the country is the rupee, a small copper coin, and a species of *cyprea*, called the *couree*, of which 6,400 constitute a rupee. The ancient gold and silver coin of India has almost entirely disappeared.

Owing to the heavy remittances made from India to England by the East India Company in silver, at different periods, there has often been a very great scarcity of the circulating medium in that dependency; so great indeed, that when famine had decimated the population, and sufficient rice might be bought for one rupee to sustain a human being for a month, there was no money to be had, and vast quantities of grain were shipped to England, to the Mauritius, to Australia, and to other parts of the world.

Although the monetary resources of any country ought to be among the first considerations in reference to its social and mercantile improvement, in regard to British India, there is reason to believe that its monetary condition never at any time engaged the serious attention of the authorities either in India or in Britain. During their supremacy the East India Company monopolized not only the commerce, but in a great measure also, if not entirely, the exchange and monetary transactions of India. So long as they were both merchants and sovereigns they were perhaps justified in endeavoring to retain, as much as possible, the whole of the exchange business in their own hands; but since they have ceased to exist as a mercantile corporation, their functions as exchange agents must be presumed to have ceased also.

The transmission of money from one part of India to another is generally performed by a class of natives termed *shroffs*, *soncears*, or exchange agents, who give drafts, called *hoondees*, on their correspondents, at an excessive rate of exchange; and make advances to the native cultivators and traders at two, three, and five per cent per month. The transmission of money from India to England, and from England to India, is done almost entirely by the East India Company, and a few private merchants whose establishments are termed "agency houses," and who carry on trade in commodities as well as in money. The large and rapid return of profit arising from exchange and money transactions induced many of the most respectable mercantile houses engaged in commerce between England and India to make trade a secondary consideration. The capital that should have been invested in the production of sugar, cotton, indigo, coffee, and other commodities, was employed almost entirely in exchange operations; and in 1830 six of the houses established in Calcutta failed to the extent of £14,330,000, inflicting great loss and misery upon the Indian community, as well as serious injury on trade and commerce.

The East India Company have an agency in India, who make advances on goods of various descriptions. These goods are shipped to England as a covering for bills received by the East India Company, and when the bills are paid the company's lien on the goods ceases. The Company make large profits upon these transactions. They alter or depress the exchange at pleasure, and with such a powerful competitor no trader can calculate for six months what the exchange will be.

The introduction of a sound and extended system of banking has been repeatedly advocated as the only proper and safe remedy for this state of affairs. And under all the circumstances that have been stated, it may be imagined that there is no part of the British dominions which presents a better field for prosecuting with success the trade of banking than India. There is indeed no country where capital may be employed with the prospect of greater profit and advantage. The recent permission to introduce railways must also tend to facilitate the development of her internal resources. Yet however apparent these facts may be, it is quite notorious that the banking and monetary facilities of British India are still of the most meager description. A glance at the number and history of the existing banks will show this. The first of these is

THE BANK OF BENGAL. This establishment was first suggested to the Marquis of Wellesley in 1798-9 by Mr. St. George Tucker, now a member of the Court of Directors of the East India Company. Although the Marquis Wellesley was duly impressed with the necessity and desirableness of such an institution, and afforded Mr. Tucker every assistance in his power, it was not until 1806 that the latter gentleman was enabled to carry his useful project into effect; and it was not until 1809 that a charter was obtained from the local government of Bengal, limiting the responsibility of the shareholders, in conformity with instructions sent out from England. An error is alleged to have been committed by the government in becoming joint proprietors with the public in this bank, instead of founding a proper system of banking, either entirely under the control of the government, or entirely open to the public. The shares of this bank have long been at a premium of sixty per cent. The annual dividend has averaged ten per cent, and the bank has distributed still further profits in bonuses.

From 1809 to 1829 there was no further attempt to form another

public bank in India. Several of the Calcutta merchants, who were also bankers, issued notes on their own private credit; and shortly previous to their failure was founded the UNION BANK OF CALCUTTA. This Bank had a career of considerable prosperity, but through the gross mismanagement of its directors it failed in 1848, entailing ruin and beggary upon many of its unfortunate shareholders.

The great losses experienced by the civil and military servants of the East India Company in the Upper Provinces, through the failure of the Calcutta agency houses, led them to form a small joint stock bank at Agra, where their savings could be safely lodged, and their money employed in advances to the land owners in the district. This is the

AGRA AND UNITED SERVICE BANK. It was established in 1833, and has agencies at London, Calcutta, Madras, Bombay, and Mirzapore. Its shares are at a high premium. The dividend paid is twelve per cent. It has no local charter, was altogether unassisted by government, and is represented to be a thriving establishment.

THE BANK OF BOMBAY was commenced at Bombay in 1837. Several hundred thousand pounds were subscribed and paid up by the shareholders, when they encountered the most extraordinary and determined opposition first in England, and afterwards from the supreme government at Bengal. At length, in 1840, a charter was obtained limiting the liability of the shareholders, the government being also copartners in the bank.

The next bank to be noticed is the BANK OF MADRAS. This is a small government bank, founded by Lord William Bentinck in 1806 for the convenience of the local authorities, and now enlarged.

Besides these there is the NORTH WESTERN BANK OF INDIA, established at Meerut, with branches in London, Calcutta, Mussoorie, and Lahore. There is also a small bank at Delhi, called the DELHI BANK.

The banks at Calcutta, Bombay, and Madras, whose notes are taken in payment of duties by government, are prohibited from entering into exchange or remittance operations beyond the limits of India. Their business is restricted chiefly to the limited population of the presidencies in which they are placed, and they are of course of comparatively little advantage to the inhabitants of India generally. The mass of the farmers and traders are still dependent upon the *shroffs*, or money lenders, for pecuniary advances, which they obtain at the rate of twenty-four per cent per annum; or they are favored with small loans from the government, to enable them to carry on their agricultural operations from seed-time to harvest.

At the Presidencies of Calcutta, Madras, and Bombay, the interest upon first-rate European securities varies from eight to ten per cent on bills at short dates. Mr. Trevelyan, in his evidence before a Select Committee of the House of Commons on East India produce, stated that the lowest rate of interest is twenty-four per cent. The ordinary rate is an *ana* a month per rupee, about seventy-five per cent per annum. The Right Hon. Holt Mackenzie stated, in his evidence before both Houses of Parliament, that the *lowest* rate of interest paid by cultivators in the Bengal part of India was two per cent per month. Mr. Gordon stated that the native bankers on small dealings charge as high as five per cent per month, which is at the rate of sixty per cent per annum.

From these statements it must be clear that the legitimate trader is very much at the mercy of those who possess capital, while the retiring civil and military servants, returning to England with the accumulated savings of years

of toil, sickness, and anxiety, have in many instances been entirely ruined by the failures of those native houses to whom they had entrusted their property. It is obvious, therefore, to all persons interested in the affairs of India, that the natural and most effectual remedy for this state of things is the introduction and extension of a sound and perfect system of banking;—a system which, while it will enable the merchants and traders to transact their business with safety and economy, will also extend to the cultivators and producers that assistance, encouragement, and protection, without which they can never hope to realize any advantage by their industry; and without which the vast resources and immense natural wealth of the Indian possessions of Great Britain must ever remain dormant and concealed.

Some more enlarged idea of the valuable and astonishing results calculated to arise from the timely and judicious introduction and establishment of a sound and well organized system of banking into India, might perhaps be formed by contemplating the beneficial advantages which have sprung from its introduction into Scotland, England, Ireland, the West Indies, Australia, and other colonies of Great Britain. In Scotland alone, the working of a sound and unfettered system of joint stock banking has been attended with the most astonishing results. Though a poor country, with a sterile soil, a cold and inclement climate, and a limited population, she has, owing to her well managed banking system, exhibited a steady and rapid improvement in commerce and the arts. Similar results have been experienced in many of the British colonies, but upon the system of colonial banking it is not our purpose at present to enter. It is imagined that enough has been stated to prove that British India is miserably deficient in banking institutions, and in those facilities which are required for the development of her immense resources.

G. M. R.

ART. II.—RECIPROCAL TRADE BETWEEN THE UNITED STATES AND THE BRITISH PROVINCES.

ONE of the marked and highly interesting features of the present age, is a growing desire among Christian nations for a more intimate communication with each other. This is the mighty stimulant that begets lines of packets, navigated as well by sails as steam, to travel the sea; and lines of railroad and electric telegraphs to travel the land, and hold communication with distant points. To meet the exigencies of the middle of the nineteenth century, time and distance must submit to comparative annihilation, and the business of a year must be compressed into a single day. By this progress of gradual, although rapid improvement, mankind are now engaged in the task of teaching themselves to do more in a season than our forefathers were wont to accomplish in a generation.

Let us, therefore, who profess to be Christians, learn to put the right interpretation on this novel spirit of our own times. All knowledge is of God; and although we may feel within ourselves the desire for this onward progress without being able to interpret for ourselves its end and consequences, yet, as we are taught to believe that all knowledge comes from him and is designed by him for good, let us not mar the handywork of the Almighty through any lack of energy of our own. Asking wisdom from on high, let

us seek the Divine aid in our pursuits, conscious that our temporal as well as our spiritual concerns are the especial objects of HIS care.

The subject of these remarks is a brief and rapid sketch of that portion of North America which now comprises the last hold of British rule on this continent. Let us, who speak the language of England, and whose minds have been enlarged and enlightened by her great men, in whose veins flow the same current that beat at the hearts of Hampden and King John, whose model government is an epitome of that time-honored constitution that has stood the battles and the breezes of eight centuries, remember that language, religion, and law makes brothers of Englishmen and Americans still, and although our forefathers met in deadly strife, let the animosities of the past molder in the graves of the victims; for us who live now, Anglo-Saxons of both hemispheres, a nobler duty is in prospect; to Englishmen America is the *El Dorado* of human rights, the plantation of the liberty of the human race; to Americans, England is the classic ground of dead generations of our forefathers. The sculptured names of Westminster Abbey are now borne by many a living statesman within the halls of our Federal councils; whilst the eloquence that echoed from the sires in the halls of St. Stephen, is repeated by the sons from pulpit, bench, and bar, over the wide expanse of Anglo-America. Spirits of our dead fathers! by the lightning's speed we hope to greet you yet across the sea!!

The names of the British provinces are Canada, (till within the last few years called Upper and Lower Canada; now under the government of a single province, and known as Canada West and Canada East,) New Brunswick, Nova Scotia, (to the government of which is attached the Island of Cape Breton,) and Newfoundland. I propose to give a few extracts from various authorities by way of tracing the early history of these separate colonies, who, although they constitute together what is commonly called "British America," have no confederate government, but are entirely independent of each other in their legislative and civil relations, and amenable only to the control of the Imperial Parliament and British crown.

Rogers, in his "Concise account of North America," published in London, 1785, thus describes the settlement of Canada:—

"This country was first settled by the French, who kept possession till September 13, 1759, when Quebec was surrendered to the Generals Monckton and Townsend, commanding the British troops; and September 8, 1760, all Canada was given up to the English in the capitulation at Montreal, agreed upon and signed by Gen. Amherst and M. de Vaudreuil, the French governor, since confirmed by the treaty of Fontainebleau. The French comprehended, under the name of Canada, great part of New England, and the provinces of New York and Nova Scotia northerly to Hudson's Bay, westerly to the Pacific Ocean, and southerly to the Gulf of Mexico; and had erected a chain of forts, from the mouth of the St. Lawrence to their settlements at Louisiana, to support their claims."

"They began the settlement of this province in 1605 at Quebec." (Seven years before Hendrick Hudson's expedition landed in the Bay of New York, which was in 1612, and fifteen years before the landing of the Puritans at Plymouth, which was in 1620.) "Quebec is situated on the north shore of the River St. Lawrence, about three hundred miles from its mouth. About the same time settlements were begun upon the island of Orleans, a little below Quebec, and on each side of the river to its mouth, and upon several small rivers that fall into it. Up the river, from Quebec about twenty miles, they soon began a settlement called Jecorty, and erected a fort at Chambly, on the River Sorrel, near where it falls out of Lake Champlain. Soon after this the foundations of Montreal were

laid on the Island of Montreal, situated in the River St. Lawrence, about 200 miles from Quebec.

"Another considerable settlement was made at Trois Rivières, so called from a river disembodying itself by three mouths or channels into the River St. Lawrence; and is situated about half-way between Quebec and Montreal, in a very delightful place."

According to Major Roberts, Quebec in 1765, which was but six years after its capture from the French, contained about 1,500 dwelling-houses, besides several public buildings, several hospitals, a nunnery, and a mansion house for the Roman Catholic bishop and the Jesuits. The population of Canada at that time he computes at 100,000.

The original settlement of the North American continent, between the Gulf of St. Lawrence and the Mississippi River, was as follows:—Of the twelve colonies originally planted, eight were English, two were French, one was Dutch, and one was Swedish.

The English colonies were North and South Carolina, originally one colony, settled in 1585; Nova Scotia in 1604, Newfoundland in 1610, New England in 1620, New Jersey in 1626, Maryland in 1633, Pennsylvania in 1681, Georgia in 1733.

The French colonies were Canada and Louisiana, settled in 1605; the Dutch was New York, in 1612; the Swedish was New Jersey, in 1626.

According to these dates, Nova Scotia was the second, Canada the third, and Newfoundland the fifth European settlement in the order of succession of that country which now constitutes the United States to the eastward of the Mississippi River and the British provinces.

Newton Bosworth, in a book published at Montreal in 1839, entitled "*Hochelaga Depicta: The early history and present state of the City and Island of Montreal*," speaks of the visit of Jacques Cartier (in 1535) to the then town of Montreal, of which the Indian name is a part of the title of his book, "*Hochelaga*," in the following manner:—

"Having seen all that he deemed worthy of notice in the city, Cartier proceeded to examine the mountain in its vicinity. It was even then, according to his account, tilled all round, and remarkable for its fertility. He was particularly enchanted with the magnificent and beautiful view presented to him from the summit of its eastern promontory; and so splendid a panorama of *thirty leagues radius*, must have given him a lofty and gratifying idea of the country he had been exploring. In honor of the king, his master, he gave to the elevation the name of *MOUNT ROYAL*, which, with a singular change in the termination, has since been extended to the city itself, and to the whole of the island and district in which it is situated."

It was called, however, Mount Royal as late as 1690 by Major Wally in his official journal, to be met with in Smith's History of Canada.

In a book edited by Robert Cooney, and published at Halifax, N. S., in 1892, entitled "*A Compendious History of the Northern part of the Province of New Brunswick, and the District of Gaspé, in Lower Canada*," we find the following account of the two provinces of New Brunswick and Nova Scotia:—

"The Province of New Brunswick formerly constituted a part of Nova Scotia," (the separation took place in 1784.) "*Nova Scotia was the first European settlement on the continent of North America.* The early history of the province involves an alternation of proprietorships between the French and the English; the former claiming it by priority of possession, the latter by discovery. The first grant of land was given by King James I., in 1621, to his secretary, Sir Wil-

liam Alexander, who called it Nova Scotia, or New Scotland. It was then considered by the English as a part of Cabot's discovery of *Terra Nova*; but the first settlers were French emigrants, who arrived there in 1604 with Monsieur Des Monts, who called the country Acadia, or New France."

After a series of changes from the dominion of France to that of England, and so *vice versa*, Acadia or Nova Scotia reverted to the British crown in 1712, and has ever since continued to be a British colony. But the peaceable possession of the country was long disturbed by hostile incursions on the part of the French until after the taking of Quebec and final ceding of the whole of Canada to Great Britain in 1760, since which time no further interruption has been given to British rule in Nova Scotia by any other power.

The Island of Cape Breton, which was, till within about twenty-five years, a province by itself, but is now attached to the government of Nova Scotia, is thus described in a work published in London in 1786, entitled "The importance and advantage of Cape Breton truly stated, and impartially considered."

"Cape Breton is situated between $45\frac{1}{2}$ and $47\frac{1}{2}$ degrees of north latitude, and is separated from Acadia by the narrows of the Gut of Canso, on the south-west; and the other strait or passage of Cape Ray separates it from Newfoundland on the north-east. It is indented on every side by large bays, which cuts almost through it in some places, and forms several commodious harbors. The island is about 120 miles in length and 50 miles in breadth."

There are several smaller islands in the Gut of Canso and the Gulf of St. Lawrence that belong respectively to the provinces of Nova Scotia and Canada East.

The waters that border Nova Scotia and the Gulf of St. Lawrence abound with fish, and furnish to the inhabitants of these coasts employment for many vessels and almost their entire population. The country itself, except parts of Cape Breton, is barren and unproductive, and the climate is cold and uncertain for almost every other crop but potatoes; hence the ground is only tilled for a secondary object, while the depths of the sea are expected to compensate man for his chief toil.

The fishermen of Maine and Massachusetts have largely participated in the mackerel and herring fisheries of Canso, Gaspe, and the Bay of Fundy for many years. By the treaty of Ghent, England gave permission to the United States to fish in these waters within one league of the coast. With that characteristic liberality by no means singular, and which renders the proverb of the "*inch and the ell*" equally as true in fact as it is in rhetoric, the Long Tom Coffins of Cape Ann and Marblehead soon forgot to measure distances, and quietly made their fish on the Nova Scotia shores until the British cruisers awakened them to a sense of their situation. Might, which, according to venerable usage, becomes right, has often sent John Bull's cruisers to sea in bad weather, and left the Swains, Harpers, and Howlands to enjoy their gurry and ill-gotten spoils together. Finally, the amiable lady across the sea, with characteristic good nature, has for a few past years allowed the Swains of Cape Sable and the Swains of Cape Ann to fish and fight in peace, no one caring to make them afraid.

New Brunswick is situated between the 45th and 49th degrees of north latitude, and between the 64th and 68th degrees of west longitude. It is about 250 miles in length and 200 miles in breadth, and contains 50,000 square miles. The first settlement of New Brunswick began in 1785, by the loyalists from New York and other parts of the United States that re-

moved from this country after the final triumph of republican principles. Its population has been increased from time to time by emigration from the mother country and a very few adventurers from the adjacent State of Maine. Its principal city is St. John, situated at the confluence of the river of the same name with the Bay of Fundy, at about 180 miles from the Atlantic Ocean. The city of St. John has been remarkable, as a colonial city, for its enterprise in navigation. The tonnage, according to population, was at one time supposed to be greater than that of any other city in the world.

In Benson's Memoir, published in the collections of the New York Historical Society, second series, vol. ii., part 1, page 84, I find the following:—

"The Sieur Des Monts led a colony from France in 1604. He entered the Bay of Fundy, thence thereafter at times known as French Bay, visited a harbor which he called Port Royal, now Annapolis, and afterwards making the circuit of the Bay, and returning along the western shore, came to a river the 24th of June, and it being the festival of the Baptist, gave it the name of *St. John*. Sailing further westward, he entered the Bay of Passamaquoddy, and landed on an island in a river emptying into the bay, to which he gave the name of *St. Croix*."

It appears from this extract that the Bay of Fundy, still called French Bay on some of the old maps to be found in the library of this society, was visited by Europeans sixteen years before the landing of the Plymouth colony in Massachusetts.

The following account of Newfoundland is taken from Rogers' book, already referred to:—

"Newfoundland, so named by the first discoverer, is the most considerable island in North America for extent, being situated east of the Gulf of St. Lawrence, between 46° 40' and 42° 07' north latitude, and 41° 52' and 57° 40' west longitude. It is bounded easterly and southerly by the Atlantic Ocean, northerly by the Straits of Bellisle, and on the west by the Gulf of St. Lawrence."

"This island was discovered by the Cabots in 1497, who took possession of it in the name of King Henry VII.; but no colony was planted here till some considerable time after." * * * "In the reign of Queen Elizabeth, Sir William Gilbert was sent out with a commission to prohibit all persons not being her subjects to fish upon the coasts of this island. No lands in the island were granted till 1610, when King James gave a grant to the Earl of Southampton, and others, of all that part of Newfoundland, lying between Cape Bona Vista and Cape St. Mary." * * * "During the protectorship of Cromwell, Sir David Kirk, without commission, took possession of the island."

After this time the English settlements declined, and the French took advantage of the circumstance and erected a fort at Placentia, and claimed the sole right to the island and fishery. After the revolution and the restoration of Charles II., the English re-established their claim, and attempted to destroy Fort Placentia, but did not succeed. The following season Sir John Norris, with a squadron, and 1,500 land forces, established a fort at St. John's, which the French attacked in the year 1705 and destroyed the town, but could not reduce the fort. In 1762 the French took the island and reduced the fort to their subjection, but it was retaken from them during the same season, and they were excluded from all parts of the island except the "*Beaks*" and a few small islands between Cape Ray and Cape St. Vincent. Major Rogers adds in 1765:—

"There are in this island many fine rivers, lakes, and rivulets, which abound with beaver, otters, and the like, and in which is great plenty of salmon, and many other kinds of fish. There is also great plenty of wild-fowl, and the forests are stored with deer, moose, bears and wolves in great plenty. But the great staple

commodity of this island is *codfish*, which are here larger and in greater abundance than in any part of the world yet discovered, and great part of the world is at present supplied with this article of food chiefly from hence." * * * "The winters are severe, attended with almost continual storms of snow, alest, &c., the sky being generally overcast." * * * "The inhabitants make use of dogs for drawing wood and other conveyances, which they manage with great dexterity, fixing them in leather collars, to any number they please."

The population of all the British provinces in North America may be reasonably calculated at about two millions of inhabitants at the present time, of which one-third are French descendants, and the remainder are either descendants of the "Refugees," who left the old colonies after their independence, or English, Irish, and Scotch emigrants from the mother country, who have come out to seek their fortune in the New World, and prefer the government of England to that of the United States.

The descendants of the "Refugees," as they were called in the land they left, or "Loyalists," as they called themselves in the land of their adoption, were settled chiefly in Nova Scotia, and on the River St. John, in the newly formed province of New Brunswick. There are several fine rivers in the British provinces, of which the noble St. Lawrence is an example, unequalled for size on the North American continent. But the St. John, which is about three hundred miles in length, is remarkable for its fertility and rural beauty. A rich margin of intervale land lines its banks for the greater part of its course, and the high lands gradually swell into inclining planes on either side as you advance, with here and there a picturesque island, studded with elms, and its bold bluffs and wooded points rising to the view.

A large number of the original settlers on the lower portion of the St. John River, and its tributary lakes and streams, were originally from Westchester county, and other counties of this State bordering on the Hudson River. The similarity of manners, looks, habits, speech and customs between the people of the Hudson and the St. John is most apparent, and could not fail to strike the visitor from either section at the moment.

For many years the British government have extended towards these provinces a scale of protective duties, by which the products of the colonies, chiefly timber, were shipped to England under an impost less than one-fifth of that charged upon the same articles from foreign countries. From causes that is not pleasant, neither is it indispensable, to explain, the growth of these colonies has been slow compared with the United States; and at the present moment, when England has withdrawn her protection, these colonies are forced to look abroad to protect themselves. Happy would it have been for them if this protection (!) had been withdrawn years ago!

Under the protection of the mother country, the trade of these provinces has been constantly subject to revulsions. Having no other markets but those of England to depend upon, every depression in the trade of that kingdom has been immediately and oftentimes fatally extended to her North American colonies. *But it remained for the final withdrawal of England's protection to strike a death-blow at the future prosperity of this country. Never was commerce and industrial pursuits more prostrate than now in British America, especially the lower provinces.*

To meet this contingency, whose paralyzing effect is sending thousands of their people into the United States to look for bread, a plan of reciprocal trade is proposed between the provinces and the United States, by which the

products of both countries may be exchanged free of duty, being nothing more in reality than what takes place between the several States themselves. The British government it is hoped will accede to the measure, and henceforth, for the time to come, this fine country and fine people will be placed on a basis of permanent prosperity and solid advantage.

In the session of Congress for 1848, a measure was proposed in the House of Representatives by which the Canadas were to be permitted to exchange the productions of their country with those of the United States free of duty. Unfortunately for the interests of Canada, the business of the session was brought so near a close before the measure was proposed, that time was not left to bring the subject up in the Senate. During the recess of last season, the merchants of New Brunswick sent authorized agents to Washington to treat with the late Secretary of the Treasury on the subject. The result of this negotiation was, that Mr. Walker, in his annual report, recommended that as well Mexico as the British provinces should be invited to come into a general co-operation with the United States on the subject of reciprocity, and that all productions of the one country might be admitted into the other independent of duties in exchange for the productions of that country alone.

The practical operation of such a system would not work against the interests of England in supplying her colonies with her own manufactures, as we have not been able as yet in the United States to manufacture as low as England does, and never expect to as long as labor costs seven times in the United States what it does in England.

I have myself bestowed a great deal of labor on the subject of convincing the people in the British provinces of the peculiar and natural advantages of sending their products to the United States instead of Great Britain; and with that object in view, and because that the importance of the trade is as great to the United States as it is to the British provinces, I propose to show in this place some of the good results that American commerce, and especially the commerce of this city, will derive therefrom. I shall treat this subject with brevity.

A glance on the map will show that Montreal, Quebec, St. John, N. B., Halifax, and St. John's, Newfoundland, are nearer to Boston, New York, Philadelphia, and Baltimore, than Buffalo, Cleveland, Cincinnati, St. Louis, New Orleans, and all the other large towns west and south that send their productions to the sea-board and receive the manufactures of the East in exchange. The expenses of transportation is far less from our principal commercial sea-ports to the above-named towns in the provinces, than it is to our chief towns in the West and South. The productions of the provinces are pine, spruce, and birch lumber in all the varieties of boards and scantling; dried, smoked, and pickled fish; lime and coal; to which might be easily added all kinds of esculenta, such as potatoes, turnips, &c., and dairy products superior to anything of the kind usually seen in our markets; whilst the quality of New Brunswick and Nova Scotia fed beef, pork and mutton, is superior to western. In respect to pine and spruce lumber alone, the forests of New Brunswick produce larger sizes and better qualities for builders than is known in our Atlantic cities. In the course of twelve years' large and intimate acquaintance with the timber trade, I have seen many sticks of pine shipped to England that would square upwards of thirty inches, and run over twenty-five feet clear of knots. Such wood, although immensely valuable to the builders of New York if it could be obtained, is never seen by them; and from all that, in the course of my inquiries as well of dealers

as builders, I have come in contact with, I have received strong wishes to be supplied with such an article.

That the price which lumber of this description would bring in New York would pay the shipper better than what it usually sells for in Liverpool, may be demonstrated by the following calculation :—

The general average price, when the trade to England was considered favorable, was about 22 pence sterling per cubic foot for timber of this description. In 1,000 superficial feet there are 83½ cubic feet, which comes to..... £7 12 02

CHARGES.

Eight per cent for loss in measurement.....	£0 12 02	
Freight, 35s. per load of 50 cubic feet.....	2 18 01	
Commissions on sale and guarantee, 4 per cent.....	0 06 01	
Insurance on cargo and freight, say 50s. sterling a 2 p.ct.	0 01 00	
Dock rates, town dues, and incidentals, say.....	0 02 00	
		8 19 04

Total.....	£8 12 10
Add one-fifth for difference in exchange and premium.....	0 14 07

In colonial currency.....	£4 07 05
At \$4 to the colonial £ is.....	\$17 49

If the same article was cut into seasoned lumber suited to the New York market, 1,000 superficial feet would be worth, delivered at a pier in the city of New York.....	\$25 00
Deduct freight, commissions, &c.....	5 75

	\$19 25
Difference in favor of selling in New York in preference to Liverpool	1 76

The credit in Liverpool is four to six months. In New York the freight part of the cargo is cash, remainder three months. The time taken to perform a voyage to Liverpool is short to reckon on an average as 35 days. The time to perform a voyage from any port in the Bay of Fundy to New York is long enough to reckon on an average as ten days. A vessel of the capacity of 600,000 superficial feet, carrying bulk, could as easily make five voyages to New York in a year as she could make three to Liverpool.

No one who has not had the means of examining into the subject can form any idea of the vast consumption of all kinds of lumber in the city of New York. In the course of fifteen years last past, the number of houses, stores, and public buildings alone that has been built in this city would make a larger city than New York itself thirty years before, or as large as Boston in the year 1830. This is without taking Brooklyn, Williamsburgh, Jersey City, or Hoboken into the account at all; the former of which cities is three times the size now that it was in the latter year, and the next is *seven times*. Besides the consumption of lumber in the city of New York and neighborhood for building purposes, the consumption of that material in our external commerce is immense. It is impossible to calculate the extent of pine lumber used for *packing-cases* and yearly sent out of New York city, with the goods they contain; but I am acquainted with one box-maker alone whose yearly consumption is over two millions of feet superficial, and this is but one out of more than one hundred of the same profession, several of which approach to nearly the same extent. All kinds of salted and dried fish are consumed over this entire continent; and the continent of South America and the islands of the Atlantic Ocean within the tropics are supplied in the main by New York, New England, Nova Scotia and Newfoundland.

So much for the import trade from the provinces to the United States, which at present is paralyzed by the restrictive duty. I turn now to the trade from the United States to the provinces. All manufactures of leather, agricultural implements, (many of which are peculiar to the United States, and not to be met with elsewhere,) many articles of hardware of superior make, and a better adaptation to colonial wants than English make, can be had by the provinces better and as cheap in the United States as they can import them from the mother country, and want but the withdrawal of the colonial imposts to find an extensive and rapid consumption among two millions of people on our eastern arm that now do not know them, or but know them sparingly.

The same causes that makes New York the place of resort of the western and southern merchant now, will make her the resort of the eastern merchant in the British provinces then, when the trade between these provinces and the United States is as free as it is between the States themselves at the present moment; namely, that because New York is the emporium of all the manufactures of the United States, as well as the emporium of foreign commodities besides; merchants at a distance come here to buy because they can buy cheaper, and find assortments better suited to their wants. Thus each alternation in the turn of trade enlarges the sphere of operations of her who is the commercial as well as the Empire City of these United States,—a city whose metropolitan character resembles the sun in his zenith, whose golden rays are always the first to shine upon each new object that comes within the reach of his beams.

Citizens of the United States, Merchants and Statesmen, ye in whose hands are the destinies of the future, think of these things! G. W. P.

ART. III.—THE COAST SURVEY OF THE UNITED STATES.

TO FREEMAN HUNT, Esq., *Editor of the Merchants' Magazine, etc.*

DEAR SIR:—I intended, in support of the article on the Survey of the Coast of the United States, which appeared in the February number of your Magazine, to have made before now a brief statement of such information concerning it as should be elicited by the debates on the subject in Congress. The documents produced during the discussion have, however, been but recently published, and contain but imperfect information on the points of most importance. In the meantime a reply to the February article, from Lieut. C. H. Davis, has appeared in the Magazine for April, and though much of the body of this latter paper consists in plain denial without proof, and is therefore not entitled to any notice, I shall glance at such parts of it as deserve most attention; not forgetting, in the meantime, the analysis of documents, which it was my original purpose to make, and which present the only additional facts worth attention.

At page 403 of Lieut. Davis' answer, he says, speaking of the author of the article in the February number, "*If one-half of what he asserts is true, why did he not bring the subject, with the authority of his name and position, under the notice of some member of the executive government, or under that of Congress.*" The writer must be little learned in the intrigues of Washington, not to know that an organized body, like the Survey of the

Coast, with an annual patronage of at least a quarter of a million, and officers and employes of all kinds, amounting to near a hundred, may be guilty of abuses, which, though apparent to all, can for a long time be practised with impunity before they attract the attention of the public press or of the opposition in Congress, the only two censors to which they can ever be made amenable. The influence of such an establishment is always powerfully felt in the Legislature, while its patronage enables it, to a very considerable extent, to control the press. There needs no other proof of this than reference to what occurred immediately on the appearance of the article on the Coast Survey, published in the February number. Anonymous communications were circulated in every direction, attacking grossly the character of the supposed author of that paper, and their admission into respectable public journals was strongly urged. The course usual in similar cases was adopted here—when you cannot disprove the testimony, you must impeach the witness. The publications thus circulated consisted mostly of flat denials without proofs, expressed in language such as became the subject. Language of this kind even found admission into the speeches of honorable Senators; and though we perceive that they have been either expunged or much modified in the reprints of these speeches, there can be no doubt but that they were really uttered in the course of debate. It should be a source of gratification to the country that some one has been found to prefer charges against the administration of the Coast Survey. The Superintendent has now a fair opportunity of vindicating his conduct and character, but it must be done by document and proof, and not by mere assertion and denial.

Lieut. Davis (pages 403 and 404) exclaims against the writer of the first article "because he has preferred to preserve his incognito." The editor of the *Merchants' Magazine* was desired not to communicate the name of the author to any one not being personally interested in the publication, or who could not satisfy him that any of its statements were unfounded. He had always authority to communicate the name to persons claiming to know it for such reasons, and there was no other legitimate grounds upon which it could be asked. At the time of its publication there existed reasons for a temporary concealment which exist no longer, and the name is at the service of the public. It has been injured, for the first time, by the influence and efforts of the Superintendent of the Survey of the Coast; but it is to be hoped that time, which always brings truth to light, will ere long do justice here.

Lieut. Davis (in the succeeding page) attacks the assertion that "a geodetique operation, such as was commenced under the authority of the law of 1807, was not contemplated or understood by the government." This assertion we deem fully proven by the wording of the law of 1807;—by the debates in Congress concerning the Coast Survey, extending from that time till 1842;—by Mr. Gallatin's letter, which limits the execution of the Survey to "as much correctness as can be obtained within a reasonable time;"—by Mr. Hassler's reply, in which, though the geodetique project is mentioned as the more accurate, still a chronometric survey is intimated as possibly becoming necessary. But, most of all, we deem this proven by Mr. Crawford's letter to Mr. Hassler of April 6, 1818, which complains of the "little progress hitherto made in the work." Strictly speaking, there has not been any mere geodetique operation instituted by any country for more than half a century. Such an operation would be (as the name implies) undertaken for purposes merely scientific, for the determination of the length of a degree of the meridian, or of the value of the ellipticity of the

terrestrial spheroid. Of this kind were the first scientific expeditions of La Condamine, Bouguer, Maupertius, Cassini, La Caille, and others. But, in these later days, the most perfect operations have been instituted with views altogether more practical and utilitarian. The surveys in Europe have been carried on, in the maritime States, for purposes either geographic, commercial, or defensive; and in the inland States for the cadastre, or apportionment of taxes. The survey of England was a continuation of the triangulation commenced in 1783 for determining the difference of longitude between the meridians of Greenwich and Paris. It was continued by the Board of Ordnance in 1791, along the southern coast of the kingdom, as affording the basis for a system of defense, and only gradually assumed its later organization and name. The survey of Scotland originated in like manner after the rebellion of 1745, and was at first described as "a magnificent military sketch;" while the survey of Ireland, said to be the most perfect operation of its kind ever performed, was executed for the plain purpose of affording "data for a mode of apportioning more equally the local burdens collected in Ireland." In this survey the compensation base apparatus was first used by Col. Colby. This apparatus was constructed by Troughton and Simms, and these distinguished artists received much and deserved praise for their invention and labor. It is on the same principle as the base apparatus constructed for the Survey of the Coast of the United States, though altogether less perfect in its arrangements; but in the reports of the Superintendent, we look in vain for any allowance of credit to the artists in this country by whom the improvements were devised and executed—their desert and honor is lost in the insatiable and all-appropriating fame of the Superintendent.

But to return to Lieut. Davis. When we asserted that the government did not contemplate a geodetic survey, we had no notion of intimating that such might not have been the aim and meaning both of Mr. Jefferson, Mr. Gallatin, and Mr. Hassler—at least if such a project should be found practicable, in the then state of public opinion and information on such subjects. We have, it is true, a theory of our own on the subject, nor is it improbable or unsupported; namely, that the Survey of the Coast was first thought of as necessary to the proper maneuvering of Mr. Jefferson's gunboats, which then constituted nearly all the navy of the United States. Be this as it may, there can be much variance between the views of two or three distinguished men, connected with a government, and those of the mass, who are their constituents. To illustrate this, I will refer to a case of no very distant occurrence, which may perhaps have fallen under Lieut. Davis' own observation. When the resolution was passed in Congress directing the magnetic observations made at Girard College to be published at the expense of the government, (an editorial function belonging as appropriately to Congress as if they had directed the publication of any other class of papers belonging to that institution, or of any other with which they had no concern,) there cannot be the slightest doubt but that the Superintendent of the Coast Survey, the member who made the motion, and perhaps one or two others, knew what they were about; but that the rest of the Congress, who gave this authority, were at all aware of the true state of the case, was evident from their astonishment when they found they had been sanctioning the publication, at an enormous expense, of two thousand pages of the most difficult kind of matter.

The next assault which Lieut. Davis attempts to make on the February

article is upon what he calls a theory of ours in regard to the wish, on the part of the army and navy, to appropriate to themselves, or to one of them, the direction of the Survey.

The expression of general views to this effect, by distinguished officers of the army and navy from 1817 till Mr. Hassler's death, will be so well remembered by all persons conversant with the affairs of that time as to need no corroboration. As expletive, however, of the feeling on that subject, we may refer to Colonel Roberdeau's paper, read before the Columbian Institute in 1826. Speaking of the British surveys, he says :—"To that nation, and to the skill and science of its naval and military officers, to whom the direction of these explorations and surveys are exclusively entrusted, are the United States and the nations of Europe indebted for a greater part of the charts now in use, as well as for geographical knowledge of the most valuable kind. The employment of officers on this service does not, however, preclude the association of others skilled in sciences connected with it ; on the contrary, they are generally employed ; but the command and management is confided to the *officers*, and they only are responsible, at the same time that due merit is allowed (Heaven bless the mark !) to each individual concerned in it for their respective investigations and services." This quotation expresses, fully and fairly, the views of the greater part of the army at that time ; and it is well known that the passage of the law of 1818 was mainly owing to the intrigues of an officer of the navy, whose name it is not worth while to mention. It is admitted that the distinguished officers named by Lieut. Davis were all intimate and valued friends of Mr. Hassler ; but to assume that either they, or the officers of the navy who served under him, were fair representatives of the general feeling of either arm of the service, in regard to the Survey of the Coast, would be as just as to presume that Lieut. Davis is at present the *amour parfait* and true exponent of the feeling of the navy either on that or on any other subject.

Lieut. Davis next lets fall his indignation upon us for speaking irreverently of Professor Henry and the Superintendent of the Coast Survey. The first of these gentlemen is only mentioned in a note as the author of an article or pamphlet, bearing his name and designation, which was certainly republished at Washington and circulated extensively for the avowed purpose of bringing the support of his name and talent to the new administration of the Coast Survey. In like manner the Superintendent of the Survey is spoken of only in reference to his works and writings. No one doubts that he possesses extraordinary abilities, and of a very peculiar and valuable order, to wit, of the administrative and absorbent cast. Any, the most superficial observer at Washington, must have noticed the extensive and all-pervading ramification of influence and espionage which has for the last three or four years supported the personal interests concerned in the Survey of the Coast. This power, under the administration just closed, has not only been felt among the legislative and executive functionaries of the government, but has entered the domain of private life, negotiating family alliances, cementing or dissolving private friendships, and characterized always by the secrecy of its motions, and the certainty of its ends. No clique or faction of equal power, or more perfect organization, has been felt in Washington since the last days of the last Bank of the United States. When the credit of the bank began to fail, and its management to be questioned, it was sustained for a long time by the personal standing of Mr. Biddle and those connected with him. But when it becomes necessary to bring private and personal influences to the

rescue of public institutions, there is always evidence of serious mismanagement somewhere; and in the case of the bank, it and its president fell very nearly together. The case is about the same with the Coast Survey now as with the bank then. It has been held and managed during the whole of the last superintendence for purposes of family influence and personal aggrandizement. We hope it may not be destined to the fate of its predecessor, but that we may "change the bailiff instead of ruining the farm." In regard to Dr. Bache personally, if we allowed him too little credit in our first notice, we trust we have amply supplied the defect in the present. As for his intimacy with Airy, Hamilton, Smythe, Arago, and Humboldt, which Lieut. Davis quotes as evidence of his distinguished abilities, we hope it may be presumed, in the present standing of American science abroad, that the bare position of Superintendent of the Coast Survey would give him an official claim to the consideration of such men even were he *twenty times* more distinguished.

Of Borden's Triangulation, the subject next treated of in the communication of Lieut. Davis, it is admitted that five out of sixteen stations occupied by Dr. Bache are identical with those previously occupied by Borden. This is certainly a pretty fair proportion. But we regret that, in order to prove the necessity of occupying these stations at all, (a point which was questioned in the February article,) it has been found necessary to disparage the Massachusetts Triangulation, and to deny that any comparison was ever made between the perfect operations of the Survey of the Coast and the more modest and humble work of its predecessor. It is said, "Mr. Bache did not compare his results with those of Mr. Borden; the means and instruments of the latter were so far inferior to those of the Coast Survey that such comparison was not desirable."

Now, that Dr. Bache had, through one of his assistants, or by some other medium, obtained possession of all the results of the Borden Triangulation, and that they were compared, and that satisfactorily, with the results of the Coast Survey, is a fact which, if an investigation of these subjects should ever be authorized, can be proven either by documentary evidence, or if not so, then by other testimony equally as conclusive. The fact of the comparison is of too little consequence to merit discussion, and was mentioned by us in our former paper merely to show that, in commencing the Survey, the present Superintendent had chosen the easiest and most healthful region for his own operations, and one in which a pioneer had gone before him, whose work, however unworthy to compare with that of the Superintendent, had at least opened for him his points and saved him the trouble of a reconnaissance. This was mentioned, also, to show that all comparison of the extent of surface covered by the primary triangulation, either in that region or in the States of New Hampshire and Maine, with surfaces of the same triangulation further southward, would produce conclusions entirely erroneous. The points in the two latter States require little or no reconnaissance, and lie, for the most part, open; while southward the preliminary operations require often, nay, almost always, more time than those which are final. The first year after the recommencement of the Survey (1833) Mr. Hassler occupied seven stations, a number which equals the greatest number ever occupied by his successor in any one year. In the succeeding years his progress, which was southward, besides being interrupted by the technical difficulties constantly thrown in his way, was obstructed by the low, impervious nature of the country, and by the time necessarily spent in reconnoiter-

ing and cutting open the lines of the triangulation. This view of the subject is entirely avoided by Lieut. Davis, for reasons sufficiently apparent, and altogether consistent with the present management of the Coast Survey. The assertion that, in taking the northern section of the Survey, the Superintendent merely assumed his proper position at its *head*, is rather whimsical, unless the head of a survey, like the top of a map, should always be northward. We deem that the proper position for the head of any establishment is always where its operations are the most intricate, and require the closest supervision; and if, at the commencement of his operations, the Superintendent had located himself among the keys and reefs of Florida instead of on the more salubrious shores of Rhode Island and Massachusetts, we apprehend that his self-denial and patriotism would have been held in much higher estimation than at present.

We have now noticed the more general of Lieut. Davis' assertions, and shall proceed to those which are more pointed and direct, not forgetting our principal object, the analysis of such documents as the late congressional discussion has furnished.

Lieut. Davis pronounces our statement, "that, at the stations of the main triangulation under the present superintendence, there are usually thirty tents with the corresponding equipage, to be striking but erroneous." It would have been a better contradiction, and have borne some likelihood, had the real number been stated. A series of flat denials of facts follow the remarks in regard to the tents, and constitute the staple of the paper. To preserve the connection and avoid referring either to the February or April numbers of the Magazine, we will extract both the original statement and its contradiction:—

"If the five years' work of the present Superintendent, with a *personnel* at least twice as large as the largest ever employed under the previous Superintendent—an appropriation more than eight times greater than that with which the work began, and nearly twice as large as that with which the former superintendence closed—and with vessels and equipages furnished by the Revenue Bureau of the Treasury Department to the amount of \$240,000 be compared with the eleven years' work done by his predecessor, it will be seen, even using the Superintendent's arithmetical process, that there is but little difference in the proportional quantities of work done. I exclude from this all comparison of the area of the primary triangulation. The reoccupation of Borden's Triangulation put the Superintendent at once in the possession of triangles with sides of from eighteen to seventy miles in length, and superficial miles by the thousand were covered with more ease than hundreds in any other portion of the Survey."—*February Number.*

Of this Lieut. Davis says, 1st. "The first two lines are erroneous. A reference to the table hereinafter given will prove this. In every case, except the topography, which has been judiciously curtailed by diminishing the distance inland to which the work is carried, and increasing the accuracy of the portions surveyed, more work has been done in five years than in the preceding twelve. The number of assistants has *not* been doubled. The appropriation has *not* been for the five years nearly double that with which the previous superintendence closed. No equipages have been transferred from the Revenue Bureau, and no vessel of that department was used until 1847. The writer excludes from his calculation the most important part of Mr. Bache's work—the most important in extent and valuable in results. In this part of the work it is strictly accurate to say, that the astronomical

observations alone (which are but a single branch of the primary field work) greatly exceed in number and intrinsic value *all* the observations of the same kind made by Mr. Hassler during the *whole eleven* years that he had charge of the work in active operation. In this connection it should be mentioned that the present Superintendent has in five years occupied as *many primary stations*, and measured twice as many bases as the former Superintendent in twelve years. The 'outer and more dangerous coast,' which the writer elsewhere says 'has not been touched,' has been surveyed to the extent of twenty-eight miles *south of Cape Henlopen*. Great credit is due to Mr. Bache for commencing the work of North Carolina, with this very object of including the coast north of Hatteras. This is one of the conspicuous merits of his *new system of operations*, that such work can be begun separately, the final union with the other sections being deferred for the present. The survey is rapidly advancing to Cape Hatteras."—*April Number*.

"In regard to several of these points, there are now printed documents not existing at the time our first article was written, and of which we will avail ourselves. The comparison then instituted between the two superintendencies as to work and expense was between four years and twelve. In the matter of expense we have now the means of making it between six years and twelve, which will give a more certain proportion.

1st. As to the quantity of work, our comparative estimate, which was as six to five in favor of Mr. Hassler, is attempted to be refuted on the authority of a tabular statement which accompanies a report from the Treasury Department to the Senate, dated February 8, 1849, and relates to the "expenditures and results of the United States Coast Survey." We repeat, that in regard to the real quantity of work, or its value for purposes either commercial or defensive, no correct estimate can be made, by comparing either surfaces of land or surfaces of paper. The bases assumed for it in the February number, namely, the number of miles of outer sea-coast, or the comparison of the areas of the secondary triangulation, or of topography, are the only ones which will exhibit the truth even approximately; and all these data, except the topography, which is admitted to be in favor of Mr. Hassler, are excluded from the table referred to. The area of the triangulation is made to include both primary and secondary; and the coast line in each survey is estimated by some method, to which the paper contains no clue. We cannot find the four hundred and five miles of sea-coast which is credited to Mr. Bache, unless it follows the sinuosities of Buzzard's Bay, and all the shores of Nantucket and Martha's Vineyard. If such be the grounds of the estimate, the quantity allowed to Mr. Hassler should include both shores of the Delaware, and the whole circuit of Long Island, and would be nearer 900 miles than 310, the length which is set down for it. We have examined the report already referred to, in hopes that it contained in detail the data from which its results have been derived, but these are looked for in vain; and we cannot better characterize this paper, than by referring it to that class of arithmetical computations for which we have already given the Superintendent due credit. And while on this part of the subject, and to render any further notice unnecessary, we will refer to another arithmetical operation, performed, it is to be presumed, by Lieut. Davis himself. In the table referred to, the coast line already finished is set down at 710 miles; in the speech of Senator Davis,* of Mississippi, the whole coast

* Speech of Mr. Davis, of Mississippi, on the subject of the Coast Survey.—Page 7.

is admitted to be more than 28,000 miles in length. At page 413 of Lieut. Davis's reply, he says, "the statement that but *one-eighth* of the coast of the United States has been surveyed, and that parties are engaged in, and have been sent to either Mexico or California, is not altogether consistent with the real facts; at least *twice* that extent having been surveyed, and the dispatch of any party whatsoever to Mexico or California never having been either made or contemplated." Now taking Lieut. Davis' data, quoted above, we should like to know by what process 710 is made *two-eighths* of more than 28,000. Equally admirable and satisfactory is the arithmetical part of the speech of the honorable Senator referred to, in which he arrives, by an indirect process, at this conclusion, that because 710 miles of the coast have been finished in seventeen years, therefore the small residuum, 27,910 miles, will be finished in fifteen years. The mystification about this process is, that the northern triangulation, which will not have its topography finished in at least eight years, is taken as part of the finished Survey. We are happy to learn that no parties have been sent either to Mexico or California, but the *official* information, as to the destination of Coast Survey parties already sent to the Pacific, is not entirely satisfactory. Mr. Davis' statement, "that the astronomical observations alone (which are but a single branch of the primary field work) exceed in number and intrinsic value all the observations of the same kind made by Mr. Hassler during the whole eleven years that he had charge of the work in active operation," is certainly very modest, and may perhaps be true. Mr. Hassler, though admitted by Mr. Davis to be a man of skill and science, was nevertheless something of a utilitarian; and if he had not been such, the coercion of public opinion would probably have made him so. He knew that astronomical observations could be made at any time (better, probably, in the next century than in this) at the principal points of the Coast Survey; and that what the country looked for and demanded, was results practical and useful to the commercial interests. Sufficient astronomical observations were made to determine nearly the difference of longitude between some points on our coast and the principal meridians of the old world; and to do more than this, Mr. Hassler had neither means nor instruments. In the matter of sounding, which is not only stated in numbers, but also in *fathoms of line*, (this is another application of the transcendental arithmetic already mentioned,) and in which the work done by Dr. Bache greatly exceeds that of Mr. Hassler,* it is to be presumed that, under any superintendence, seventeen vessels would do more sounding than four. So much for the *quantity* of work.

Lieut. Davis' next point is a flat denial. "The number of assistants has not been doubled." On this subject there is at present a document, namely, (Executive Doc. 29,) a report from the Secretary of the Treasury, communicating one from the Superintendent of the Coast Survey, "in relation to the number and cost of vessels in the Survey of the Coast of the United States, the number of persons *annually* employed, and the sale of maps by the disbursing agent of the Coast Survey." This report, though called for by a resolution of the 28th of December, and evidently requiring but little labor or research in its compilation, was not sent to the Senate till the 9th of February, and had not been printed at the adjournment of Congress. According to this paper, the following was the number of persons annually employed under the different superintendencies:—

* The square feet of paper and fathoms of sounding line contained in the Superintendent's tabular statement, are specimens of his uncontrollable propensity to such quaint computations.

	1843.	1848.		1843.	1848.
	Mr. Hamler.	Mr. Bache.		Mr. Hamler.	Mr. Bache.
Superintendent and assistants.....	17	21	Engravers.....	4	8
Draughtsmen.....	..	9	Printers.....	2	2
Computers.....	..	3	Instrument makers...	2	3
Disbursing agent.....	..	1	Artificers.....	1	1
Clerk.....	1	1	Total.....	27	49

Even as here stated, the number under the last superintendence is nearly double that under the first; but when coupled with the following explanation, contained in the body of the report, it will be seen that the proportion may be much greater. The explanation is as follows:—"There are, *besides* these, persons temporarily employed by the Superintendent and assistants as hands, and in the *capacities recognized by the regulations* in the field parties and office, the number in each part varying with the requirements of the service in which the parties are engaged, *but paid at specific rates, under the law by the regulations of the Treasury Department for the Coast Survey.*" It will be evident that the resolution has produced only information of the number of persons employed *by the year*, and that a portion of the *personnel* has escaped the census altogether. We are satisfied that the number of civil assistants mentioned in the February number (sixty-one) is rather under than over the truth. But it was not to the civil assistants alone that we referred when speaking of doubling "the official patronage of the Superintendent," but of the whole *personnel* of the Survey. The following comparison, even admitting the imperfect information communicated in the report, shows the relative *personnel* of the two Superintendents:—

	Mr. Hamler.	Mr. Bache.
Civil assistants.....	27	49
Naval officers.....	18	49
Total.....	45	98

This statement of the February article is therefore not contradicted by any documentary evidence.

The next point made by Lieut. Davis is also a flat denial. He says, "the appropriation has not been, for the five years, nearly double that with which the previous superintendence closed." Upon this point we have now also documentary information, contained in the report above quoted, and in one from the Register of the Treasury,* which will enable us to compare the respective expense for six years of Dr. Bache, with twelve years of Mr. Hamler, and thus arrive at a more perfect determination. The following is the official statement of the legitimate appropriations:—

MR. HAMLER.			
1807, February 10.....	\$50,000 00	1839, March 3.....	\$90,000 00
1812, " 26.....	49,284 25	1840, May 8.....	100,000 00
1816, April 16.....	29,720 57	1841, March 3.....	100,000 00
1816, " 27.....	54,720 57	1842, May 18.....	100,000 00
1832, July 10.....	20,000 00	1843, March 8.....	100,000 00
1833, March 2.....	20,000 00		
1834, June 27.....	30,000 00	Total.....	\$1,003,725 39
1835, February 18.....	30,000 00	Deduct amount carried to	
1836, May 9.....	30,000 00	surplus fund.....	96,407 37
1837, March 3.....	30,000 00		
1838, July 7.....	90,000 00		\$907,318 02

* Executive Documents 4 and 26.

MR. BACHE.

1844, June 17.....	\$80,000 00	1849, March 3.....	\$80,000 00
1845, March 3.....	100,000 00	1849, " 4.....	186,000 00
1846, August 10.....	111,000 00		
1847, March 3.....	146,000 00	Total.....	\$818,000 00
1848, August 12.....	165,000 00		

In the estimate of expense, contained in the February article, we had supposed that the Washington and Gallatin had been transferred from the revenue service to that of the Coast Survey without any consideration paid from the appropriations. In this it appears we were mistaken, those vessels having been purchased by the Coast Survey from the government. Indeed, so strict seems to have been Mr. Woodbury's construction of the laws both of 1807 and 1832, that previous to selling the Washington to the Survey, she had been chartered or hired by it in the usual manner. Mr. Woodbury does not seem to have been of the opinion of the late Secretary of the Treasury,* that the laws of 1832 revived that part of the law of 1807, which authorizes the transfer of public vessels to the Coast Survey, else he would have never received payment for the use of the Washington while she belonged to the revenue service.

Both the Secretaries have high legal reputations, and would not of course be allowed to overlook any point in the construction of statutes so plainly worded. The documents referred to also afford data in estimating the value of vessels transferred to the Coast Survey.† The cost of one of the steamers is set down at \$120,000; and from it and the description of the others, we may arrive at some conclusion as to the value of the vessels thus transferred.

In these documents, also, it is estimated that no extra expense is incurred by the government in employing officers of the army and navy in the service, there being no increase of pay to the army; and to the navy, only the difference between the pay on leave and the pay when on sea service. This opinion, so far as the navy is concerned, is sanctioned by a communication from the late Secretary Upshur. It presents a new view of the case, and would seem to be as reasonable as the supposition that if one purchases stocks above par with money, he only pays the premium. In making the comparative estimate of the expense the whole pay is included, as it is done in both cases. There can be no wrong to either party.

The following is a statement of the vessels now in the service of the Survey of the Coast, with an estimated value of those transferred from the Treasury, War, and Navy Departments.

Name.	Value.	Name.	Value.
Bibb†..... From Treas. Dept.	\$120,000	Haesler..... Built.....	.....
Legare†..... ".....	100,000	Bancroft..... ".....	.....
Walkert..... ".....	120,000	Vanderbilt.. ".....	.....
1 small steam vessel and 2		Gerdes..... ".....	.....
schooners.. From War Dept.	60,000	Phoenix.... From Navy Dept.	\$6,000
Washington. Purchased.....	.....	G. W. Bache ".....	4,000
Gallatin.... ".....	.....	Wave..... ".....	5,000
Nautilus..... Built.....	.....	Wise..... ".....	.....
Petrel..... From Navy Dept.	5,000	Nymph..... Built.....	.....
J. Y. Mason. Built.....	.....	Total value.....	\$420,000

* See letter of the Secretary of the Treasury to the Chairman of the Committee of Commerce, Ex. Doc. 26.

† Executive Document 26, pages 5 and 6.

‡ Steamers.

§ Document 26, page 4; 22, page 2.

The comparative estimate, according to these more recent authorities, will stand thus :—

	Mr. Hamner, 12 years.	Mr. Bache, 6 years.
Legitimate appropriations.....	\$907,317 88	\$818,000 00
Constructive appropriations, vessels.....	.....	420,000 00
“ pay.....	260,000 00	324,000 00
Total.....	\$1,167,317 88	\$1,562,000 00
Average annual expense.....	97,276 49	260,333 33

If the pay be omitted in each estimate, still the average annual expense of the last superintendence is more than double the first. It cannot be said that because the steamers could not be sold, that therefore they are worth nothing; or because they can, at the pleasure of the Departments, be transferred back again to their original service, that therefore they do not now pertain to the Coast Survey. The object of this communication is to show what are now and have been the resources of the Superintendent of the Coast Survey, and to compare its results with the establishment which preceded it.

Lieut. Davis is perfectly right in saying that no revenue vessels were used until 1847. Previous to that time the Departments hired and sold, subsequently they transferred. That no equipages were transferred is not strictly correct. The equipage of a vessel consists, we suppose, of boats, anchors, cables, &c., and it is to be presumed that all these were furnished in this case.

The statements concerning the abandonment of steam vessels in the revenue service, and the reasons for transferring three of them to the Coast Survey, which is given in the documents referred to, exhibits some facts and reasonings which are curious at least, if not inconsistent with each other. It seems that when the late Secretary of the Treasury came into office he found contracts existing, made with his predecessor, for the construction of steam vessels for the use of the revenue service. Being of opinion that such vessels were not adapted to that service, he at first suspended the contracts, but afterwards revoked the suspension in conformity with an opinion of the Attorney General, that the faith of the government had been pledged to their execution, and could not be broken. Two of the steamers, the Bibb and Legare, were furnished with propellers, and the Walker with side-wheels. The two first vessels turned out failures, not answering the purpose for which they had been constructed; but the other one, the Walker, was found to be a vessel of the first class, answering every expectation. It appearing, by retaining these vessels in the revenue service, that an expense must be incurred of several hundred thousand dollars, it was decided to dispose of them, and for this purpose one of the imperfect vessels was offered for sale. As she did not command any price at all comparable with her cost, the steamers were turned to other ends, and three of them, including the Walker, were transferred to the Survey of the Coast. The annual saving to the revenue service by dispensing with them is estimated at \$39,000. Now it would appear that, in the Coast Survey, the use of these vessels, extending through at least seven months of the year, must be more expensive than if they had been left in their original destination; and as both services are equally supported by the government, it seems curious, if not inconsistent, that what occasioned a loss of several hundred thousand dollars in one service, should be found an economical arrangement in the other.

Lieut. Davis says that “great credit is due to Mr. Bache for commencing

the work in North Carolina, with this very object of including the coast north of Hatteras. The Survey is rapidly advancing to Hatteras." The survey of North Carolina was commenced, under instructions given to the writer of this paper, dated April 29, 1843, eight months before Mr. Bache became Superintendent. His great credit on this point is therefore solely due to his absorbent qualities. It does not appear that the Survey is one inch nearer Cape Hatteras now than it was then.

In regard to the errors in the original construction of the Chart of Long Island and the Delaware, which we stated as having "more than doubled the expense of the charts, and delayed for about two years, their publication," we reiterate the assertion that such is the fact. An investigation will prove it to be true.

The next point of the communication of Lieut. Davis is personal in the wrong sense, inasmuch as it insinuates charges of a serious nature against some person, without designating either the person or the crime. It were needless to say, that they are not both understood. But the public will probably soon be put in possession, from another quarter, of the facts of the case in a more authentic shape than can be given at present.

In the remaining parts of Lieut. Davis' paper, there does not seem much of importance to be considered. In regard to the monthly reports, he admits that they do not contain a single item of the information mentioned in the February number as having been directed by the regulations of 1843. He admits, also, that the name of the present Superintendent appears upon all the sheets of the work, which is all that was asserted.

The author of the article in the February number apologizes for having overlooked Silliman's Journal. He was under the impression that it was devoted almost exclusively to chemical subjects; and even if it had not been, it could scarce have been expected to publish a paper which would have occupied at least three of its numbers.

In regard to the Superintendent's compensation, we are firm in our opinion that it has been *at least* equal to the amount stated in the February number. Nothing can determine this but an examination of the accounts.

We now take leave of Lieut. Davis, who seems to wonder if there be any mismanagement or corruption in the Coast Survey, that such defects should not have been first exposed by its friends and *employees*. In other words, he seems to hold opinion with some of the aborigines, "that a man should first show his manhood by beating his mother." Of the spirit in which his paper is written we say nothing, though in this respect he has expended some acumen upon us, and filipped us with a few quotations. We agree with him in his estimation both of Milton and Shakespeare, though we cannot but think that the comparison between the Coast Survey and the Lady in Comus is somewhat unfortunate. He will remember that though the lady had really "the strong siding champion" and two brothers in attendance, she nevertheless lost her way, and was only rescued by supernatural interference. Perhaps Lieut. Davis anticipates some such danger in the present case, and intends playing the part of the attendant spirit himself. If so, we commend him to his function, which is certainly one both honorable and becoming.

ART. IV.—LAW OF DEBTOR AND CREDITOR IN MARYLAND.

NUMBER II.

MERCANTILE CONTRACTS.

IN a former article on this subject, which appeared in the April number* of the *Merchants' Magazine*, were pointed out some peculiarities of Maryland Law, affecting the commercial relations; in this it is proposed to consider some points in the Law of Mercantile Contracts, noting any legislation concerning them, and illustrating them by decisions in the Maryland Courts.

The law governing mercantile contracts is comparatively of modern growth, founded in principles of equity and fair dealing, and is therefore nearly the same in all civilized countries; the difference therein having reference generally to the remedies given for the breach of them. The interpretation of contracts, and the rights and duties of the parties, are governed by the law of the State in which they are made, or in which they are to be executed. If valid there they are valid everywhere, and the execution of them may be enforced in any other, unless they be against the public policy or morals, or the law of the country where the action is brought. This latter also determines the form of the remedy, and the time and mode of suit. The most usual of these contracts are those of Sale, Bills and Notes, Guaranty, Debt, Charter-Parties, Insurance, Bottomry, and Contracts with Carriers, Seamen, &c.

The form and requisites of the CONTRACT OF SALE are governed by the Statute of Frauds, (1661,) which enacts (sec. 4) that no action shall be maintained on any agreement for the sale of goods, wares, &c., that is not to be performed within one year, unless the agreement be in writing, signed by the party to be charged or by his lawful agent; and, (sec. 17,) that no contract for the sale of goods, &c., of the value of £10 and upwards, shall be valid, unless the buyer shall accept part of the goods, and actually receive the same, or give something in earnest to bind the bargain, or in part payment; or unless some memorandum in writing of the bargain be made and signed by the parties to be charged, or by their lawful agents. The decisions in Maryland in regard to what constitutes a sufficient delivery, part payment, memorandum and signing, are generally consonant with those made in the other States, and in England.

A bill of parcels is evidence of a contract, if accepted by the purchaser from an agent of the seller; the acceptance makes the agent of the seller the agent of the purchaser also for signing the purchaser's name. By an act of 1729, a bill of sale of personal property, executed in good faith, acknowledged and recorded within *twenty* days, dispenses with the necessity of actual or symbolical delivery, and *vests the property* in the purchaser, although the seller was indebted at the time, and continues in possession after

* In that number there are one or two omissions and mistakes of the printer, which are corrected in this note. At the end of section 3, p. 393, should have been inserted as follows:—"And the oath or affirmation of any clerk, store-keeper, or disinterested credible witness, taken before any judge, or justice, or court of this State, to the delivery of goods or money by any merchant, &c., to any person within this State, shall be good and sufficient evidence to charge the person to whom paid or delivered, *provided such oath be made within twelve months from the date of the articles delivered*, and that the person claiming shall also, before the time at which defendant ought to plead, make oath that he has not been paid, &c., as above." Under this law the correctness of a merchant's books may be proved, as well as the delivery and price of the articles sold, once every year, by the oath of his clerk, &c., and it has been a custom with some here so to do. On the same page, in section 5, it should be "21 in females as well as males;" and in the 37th line on page 394, it should read "*for violation of any duty*," &c.

wards. The delivery of a sample or specimen, unless it is to be taken as *part* of the commodity, is no part delivery. The order of the seller in favor of the purchaser, on the party in whose possession the goods are, is sufficient to take the case out of the statute.

Where a party, having a judgment against another, aids such person in purchasing goods on credit, with the fraudulent intention of levying his execution thereon, when they come into the purchaser's possession, the sale is void, and the seller may retain such goods.

So where a party purchases goods, knowing himself to be insolvent, and prevents the seller's acquiring knowledge of that fact by ordinary prudence, and has no intention or expectation of paying for the goods when he obtains them, the sale is fraudulent and void, and no title passes. The mere fact of knowledge, by the seller of goods, of the illegal purposes of a purchaser, without aid or interest therein on his part, will not prevent a recovery of their price.

WARRANTIES

On the sales of personal property are either *implied* or *expressed*. The former arise by operation of law, and without any intention on the part of the seller to create them : as a warranty that the goods sold are the property of the seller ; or that provisions for domestic use are wholesome ; or that an article to be manufactured for a particular purpose shall answer that purpose. Where the seller, *knowing* goods to be unsound sells them as sound, he is liable for the fraud.

Every affirmation at the time of sale of *personal property* is a warranty, *provided it appear to have been so intended*—not stated as mere matter of description, belief, or opinion, but as an averment of a material fact, of which the seller has taken to himself the knowledge, and the existence of which he warrants. It should seem that the statement in a bill of parcels, or any similar instrument, of the quality or condition of the thing sold, is a warranty thereof. Thus, where the bill rendered was for “— gallons of winter-pressed” oil, it was held a warranty that the oil should be of that quality. Without an *express* warranty or *fraud* on the part of the seller, he is not in general answerable for any defect in the quality or condition of the article sold. The exception to this rule, that there is an implied warranty in cases where there is no opportunity for inspection or examination, applies to those cases only where such examination is, at the time of sale, morally speaking, *impracticable* ; as, for example, where goods are sold to arrive. “Inconvenience” of examination is not equivalent to impracticability. A., a commission merchant, receiving manufactured tobacco for sale, sold a quantity to B. without making any warranty, and not having examined it, and delivered the following bill of parcels : “24 kegs tobacco branded (*Parkin*), weighing, &c., &c.” The price agreed on was a full price for the best quality of such tobacco—the brand a favorite one, always considered remarkably fine, and the seller knew it was purchased to be sold again : held in Maryland that this contract was fulfilled by the delivery of 24 kegs of tobacco, branded *Parkin*, although it was afterwards discovered that the tobacco was *rotten at the time of sale*, and an offer made to return it, and the seller was permitted to recover the full price agreed to be paid, being the full price of the best quality of such tobacco.

Under the principles of law, as declared in some of the other States, the purchaser is never entitled, by mere breach of warranty, in the absence of fraud, to rescind the contract or return the goods ; but in *Maryland* a differ-

ent rule prevails. Thus, if the seller *affirm his wares to be of a particular quality or soundness*, and they are purchased upon the faith of such affirmation, which turns out untrue, the purchaser may either *return the goods*, or notify the seller of their place of deposit, and recover back the purchase money. But he cannot *sell the goods as his own*, and afterwards sue the seller for breach of warranty. Where a merchant in Baltimore bought goods, warranted of a certain kind and quality, and without examining, shipped them to a foreign port, where on being opened they were discovered not to be of the quality warranted, he would be allowed to store them *there*, give notice to the *seller*, and recover back the money paid for them. But he cannot be allowed to sell the goods, receive the money, and afterwards sue the seller for breach of warranty. Nor in such case could he be allowed to set up the breach, in an action *against* himself, for the price; for by his sale he has put it out of his power to place the seller in the same situation as before their contract.

Sometimes it is impossible to return the goods which had not turned out as warranted; as, for example, when they had been worked up into a building, or manufactured article, before the defect was discovered. In such case, the seller could not recover more than the *real* value of the article, or the amount of actual benefit to the purchaser, who, if he had paid the full price, would have his remedy on the breach of warranty.

Since, in by far the larger number of sales, the day of payment is to be subsequent to that of delivery; in other words, since the goods are sold on credit, from the contract of sale naturally arises that of

DEBT.

This exists in all cases where a determinate sum of money is due from, and unpaid by, one (the debtor) to another (the creditor.) The duty of the former is to tender payment at the proper time and place, in the proper mode, and to the proper amount. Payment may be made in cash, or in goods, (if so agreed,) or by mutual settlement of accounts, or by accepting a draft, or taking a note in satisfaction. A tender before the time that a debt is due, or to a larger amount, is legal; but it is not so in the latter case, if change is required. An offer to pay part will not suffice, a creditor being under no obligation to receive less than the full amount due him. On the other hand, a debtor is not obliged to pay in instalments, or by accepting various orders of his creditor, making up in amount his whole indebtedness, unless such has been their course of business, as bankers, brokers, &c. A devise of land, or a legacy to the creditor, of *less* than the amount due, is not considered in law a satisfaction of the debt. It was established long ago that one of a *larger* sum was to be so considered; but courts will, upon slight circumstances, refuse so to regard it, and hold that it was the intention of the testator to *give* the sum from his bounty, in addition to the payment of the sum already justly due from him.

The taking of a bill, or note, is no extinguishment of the debt for which it was given, (unless so expressly agreed,) but merely operates as an extension of the time of payment, suspending the right of action in the meantime. It has not even this effect, in cases where the debt secured thereby is of higher degree than simple contract; as if it be secured by bond, or due on account of rent, &c. Nor, in this latter case, does it take away the right of distress before its maturity, unless by special agreement to that effect.

A debtor is sometimes such on various accounts, or in different capacities; and when money is paid by him, it is often important to know to which

debt such payment should be credited. The general rule is, that the debtor may, at the time of making such payment, apply it to the extinguishment or reduction of whichever he pleases; but in case he make no specific appropriation, either expressly, or by inference from particular circumstances, the creditor may apply it to whichever he thinks proper. And it makes no difference that one debt is due on open account, another on bond, another secured by guaranty: in either case the creditor may, though he received the money by the hands of the party who had guaranteed one of the debts, apply the unappropriated payment first to the open account; and this, although the open account existed before the bond or guaranteed debt, and the surety in the bond or guaranty had no notice of it at the time of assuming the liability.

And a creditor, on the omission of the debtor to do so, may apply the payment to the satisfaction of a debt, or that part of it barred by the Statute of Limitations; but such payment on account, and the application of it in this latter case, will not relieve the balance of such debt from the operation of the statute.

The amount of indebtedness is frequently increased, in consequence of the neglect of the debtor to pay at the proper time, by the addition of *interest*, which is in the nature of damages for the detention of money. This is recoverable as of right upon contracts in writing to pay money at a day certain; as upon bills, notes, &c., or on contracts for the payment of interest, or where the money claimed has actually been used by the party detaining, and upon bonds, &c. But in other cases, (as on items of account for work and labor, &c.,) whether interest shall be allowed, is a question left for the jury to determine, under all the circumstances of the particular transaction. Compound interest is allowed where a trustee is directed to invest, has failed so to do, and has actually used the funds for his own benefit; for it is upon this ground that the allowance is made. If, on account of a debt bearing interest, a sum of money is paid, in amount exceeding the interest due, (or if the sum paid is equal to the principal,) it is to be applied, in the first place, to the payment of the interest, and the residue to the reduction of the principal: the balance then becomes a new principal, bearing interest.

By an act of 1826, calculations and deductions of interest made according to "Rowlett's Tables" are legalized; and by a late act, (1845,) usurious contracts, which before were *wholly* void, are so now *only* for the *excess* of interest taken beyond the legal rate of *six per centum*. And a mortgagor in addition to the other covenants usually contained in a mortgage, (to pay the interest, &c.,) may also bind himself to pay, in addition to such interest, all taxes, &c., levied on the mortgage debt, or principal loaned and secured thereby.

GUARANTY

Is an agreement to answer for the debt, default, or miscarriage of another person, who is, in the first instance, liable for the payment, or performance of the duty wherein default is made. By the Statute of Frauds, such agreements, or some note or memorandum of them, must be in writing, and signed by the party to be charged; or his lawful agent. The contract may be collected from several distinct papers, provided they can be sufficiently connected without oral testimony. Thus, where A., having consigned goods to B. for sale, wrote to B. "to state upon what terms he would guarantee the payment therefor, so that he might draw upon him and close accounts;" B.'s answer, *making no mention of guaranty*, but authorising him to draw for the

amount due, deducting interest and nine per cent exchange on a part thereof, was held to constitute a guaranty. The statute, requiring them to be in writing, applies only to *collateral* promises, which are strictly to answer for the debt, &c., of another, liable in the first instance, founded on that liability, and without any new consideration to the promisor. Original undertakings, arising where, in addition to the indebtedness of another, there is a new or superadded consideration to the party promising, and where, although the goods are sold to the party undertaken for, the credit is given exclusively to the party promising, are not within the statute, and are good without writing. This latter class, however, is not strictly of promises to answer for the debt, &c., of another; and in fact, whether a contract be within the statute or not, depends upon the question "to whom was the credit given so as to make him, in the first instance, liable?" For A. may deliver goods to B. on C.'s credit, or he may sell goods to be on the faith of C.'s promise ultimately to pay in case B. does not. In the former case C. is the real debtor, while in the latter he is not originally liable; his is a *collateral* promise to answer for the debt of B.

By the English construction of the statute, the *consideration*, being an indispensable part of every agreement, must appear on the face of the writing. In some of the States, as in Massachusetts, Virginia, Tennessee, and North and South Carolina, this has not been strictly followed; but in Maryland the English rule prevails, and, except bills and notes taken before maturity, all unsealed contracts to answer for the debt, &c., of another, require a consideration which must appear on the face of the instrument, either by express statement, or from just and natural inference. The words "for value received," sufficiently impart a consideration. Therefore, where upon B.'s note, payable to C., A., not a party thereto, endorsed "I hereby guarantee the ultimate payment of the within," and signed, it was held void for want of consideration. Where the writing was, "I hereby guarantee the payment of any goods you may deliver to A.," the subsequent delivery to A. is the consideration necessarily inferred.

In general, a guarantor has a right to notice of acceptance of his guaranty, and of any action thereon, and of the extent of credit allowed under it; especially if it be a *continuing* guaranty. Where, from the form or terms of the proposal, it is evident that no notice of acceptance was expected by the proposer, and that no further inquiry need be made of him, it is not to be considered a mere overture, but a contract, if in fact accepted, though no notice thereof be given.

A guaranty once made, continues until revoked; the rule being that if it were the intention of a party to confine his liability to a single transaction, he should be careful so to state it. B., recommending C. and D., wrote to A., "I will guarantee their engagements, should you think necessary, for any transaction they may have with your house." This was held to be a *continuing* guaranty, and that B. was liable for all goods subsequently sold by A. to C. and D., while the letter continued unrevoked.

The liability of a guarantor of the debt or undertaking of another, (unless by the terms of his contract it be otherwise stipulated,) does not, like that of an endorser, depend upon the contingency of his being informed of the non-payment by, or default of his principal.* Of this he is bound to take

* The endorser of negotiable paper is entitled to strict notice, but the guarantor of a promissory note is only entitled to notice when his rights may actually be prejudiced by the want of it. The rule has been stated to be, that the guarantor of a note was entitled to notice of non-payment by the drawer, unless the drawer was insolvent at the time of the maturity of the note.

notice at his peril, and he is not discharged unless the debt be forgiven; or the conditions of the contract be not fulfilled; or some other be substituted in its place; or there be fraud; or time be given to the debtor, so that the guarantor's rights against him are thereby prejudiced.

Parties are sometimes charged, not as guarantors, (for in that case the statute requires written evidence of the guaranty,) but in an action for deceit, as having *wilfully* made *false* representations to others of the solvency, honesty, or capacity of third parties; thereby enabling such parties to obtain goods or credit, or to effect purchases on more favorable terms. Such false representations, made with intent to deceive, are sufficient grounds for the action, without proof of benefit to the party making them, or of collusion by him with the party benefited. These have sometimes been called "representations in the nature of guaranties," and are not considered promises to answer for the debt, &c., of another, but cheats and frauds upon the creditor to whom they are made, and for which he is to be indemnified.

In *England* written evidence of such representations, signed by the party making them, is now required in order to enable the party injured thereby to recover. In this State there is no such provision.

BILLS OF EXCHANGE AND PROMISSORY NOTES.

Bills of Exchange were always held negotiable under the custom of merchants, but promissory notes owe this quality to the statute 3 and 4 Anne, (passed in 1704, and enforced in almost all of the States,) which placed them upon the same footing as foreign bills, except that no protest is required.

All bills and notes *drawn or made in Maryland* (since 1844) to secure the payment of *more* than \$100, are mere nullities as rights of action, or evidences of debts against any parties thereto, unless *stamped* as therein directed; that is to say, on every *bill, note, bond, mortgage, &c.*, to secure the payment of *more* than—

\$100 and not exceeding \$200, a stamp of.....	10 cents.
200 " " 300, "	15 "
300 " " 500, "	25 "
500 " " 1,000, "	50 "
1,000 " " 1,500, "	75 "
1,500 " " 2,000, "	\$1 00
2,000 " " 3,000, "	1 50

Of course, bills drawn *out* of the State on parties residing here are not chargeable. In some of the States (as in Virginia, Pennsylvania, Missouri, &c.) *sealed* notes and instruments are by statute made negotiable; but in *Maryland*, bills and notes under seal, though payable to order, are not negotiable in the proper sense of the term (by endorsement.) They may, however, be *assigned* in writing, (as on the back, for example,) and the assignee may recover in his own name against the maker. Thus, where the payee of a sealed note endorsed his name thereon in blank, the holder was allowed to write over it words, such as "I hereby assign and transfer the within," &c., and recover thereon. So where the promissory notes of a corporation, though payable to order, were *attested by its seal*, and endorsed in blank by the payee, (who, in consideration of his indebtedness to the company, endorsed their notes to secure the same,) the holder was allowed, by writing over such endorsement words amounting to a *guaranty*, to recover against such payee and endorser as *guarantor*.

In general, however, where a note is payable to order and negotiable in its

form, no other use can be made of it, by filling up a blank endorsement, than to point out the payee; and the endorser in blank can be made liable only as such, upon the contingencies of non-payment at maturity by the maker, and legal notice to himself of that fact. If either be neglected he is discharged, unless he has waived such privilege; and if with knowledge of want of demand upon the maker, and of legal notice to himself, he *subsequently* promise to pay, (without any new consideration,) he is still liable.

Taking from a purchaser or debtor his, or any third person's note or acceptance, is no extinguishment of the original debt, unless the creditor so taking it has *expressly* agreed to receive it in payment; or has negotiated the instrument so as not to render himself personally liable thereon; or by his negligence has prejudiced his debtor's rights against the maker of the note given. And where a receipt in full was marked on a bill of goods, and it appeared that payment was by the purchaser's note, the seller was allowed, after maturity and non-payment of the note, to sue on the original cause of action. In cases where goods are obtained for a note under fraudulent representations, the creditor is not bound to wait till maturity, but may sue at once for the value of them.

Notes, &c., are frequently signed by the maker, as agent, president, or treasurer of some corporation. If the note in these cases is such as the company is not authorized, by its charter, to make; or if the contract is, in any manner, not binding upon the principal, the party so signing is *individually* liable. And the same rule holds where the notes are regular in their creation, and are in the usual form, as "I promise," &c., and signed as *agent*, &c. The addition to the name in these cases is considered merely as a description of the person, and not as confining his liability to his capacity as such agent, &c. But where it plainly appears, *in the body of the instrument*, that the party signing did so as an officer of the corporation, or was acting as the agent of another, the stipulations bind the principal only, unless it plainly appears that the intention was to superadd the agent's personal liability. More especially when the credit was understood to be given to the principal or corporation.

On all bills of exchange drawn in this State on any person or corporation, *in any other of the United States*, and protested there according to the laws thereof, the person is entitled to recover, 1. the sum necessary to purchase, at the time of verdict, a good bill of like amount; 2. the costs of protest; 3. legal interest on the *whole* sum allowed by the act; and, 4. *damages* at the rate of *eight per centum*. In case of a bill drawn in this State on any person, &c., *in any foreign country*, the like amount of costs and interest are allowed to the holder, together with *damages at the rate of 15 per cent*. The endorser who pays the party entitled the aforesaid value, interest and damages, may recover the sum so paid with interest from the drawer. Protest, duly made by a notary public, stating the fact of giving notice, &c., for non-acceptance or non-payment, is *prima facie* evidence of those facts. Innocent holders for valuable consideration of paper, which was usurious in its origin, may recover the full amount thereof; and by a late law, *any* holder of paper or lender of money, *though at usurious rates*, may recover the sum *actually paid or lent*, and interest thereon, at the rate of *six per centum*.

CONTRACTS WITH CARRIERS.

A common carrier is one who undertakes for reward to transport the *goods* of those who may choose to employ him from place to place. Stage own-

ers, and steamboat and railroad companies, are common carriers of parcels, and of the *baggage* of passengers, but not of their *persons*; and for injuries to the latter, they are liable only when there is want of care and prudence, or deficiency of means of conveyance. Where there is no *special* agreement between him and his employer, modifying his responsibility, (the reservations in bills of lading will be considered hereafter,) the carrier is liable for *every* loss or damage happening to the article while in his custody; unless it were occasioned by the act of God, (extraordinary violence of nature,) by the public enemies, or by the fault of the party complaining. He is considered in some sense an insurer against all accidents which can occur by the intervention of human means, however irresistible or inevitable they may be; and he is therefore responsible for losses from fire, robbery, &c. And he cannot restrain or limit this liability by advertising in the public prints, or by notices posted up in his place of storage or deposit, that the baggage or goods carried are to be "at the risk of the owners." Thus it was held in a case in Maryland, that, even if he could do so, (which, for the purposes of that case, it was not necessary to decide,) he must bring the notice to the party in *plain and unambiguous* terms. And it has been elsewhere decided that a common carrier *cannot* limit his responsibility by a general notice *brought home to his employer*, as being against the policy of the law; and it is apprehended that such may be regarded as the settled principle of law for this State. It has sometimes been a question whether a common carrier is liable for the loss of *money* in a trunk; and it would seem, that though a traveler may put there a *reasonable* sum for his traveling expenses, yet if he have a large package there, or an unusual amount, it would not be included as *baggage*, and the carrier would not be responsible for the money if lost. And it is not the duty of the owner to disclose the value and nature of the contents of his parcel or trunk; but the carrier is liable therefor, *whatever* they may be, except in cases of misrepresentation by the employer, when questioned by the carrier as to the contents, so that he may know the extent of his liability and make a corresponding charge.

ART. V.—THE SUB-TREASURY AND THE TARIFF.

TO FREEMAN HUNT, Esq., *Editor of the Merchants' Magazine, &c.*

MY DEAR SIR:—In looking over the pages of your useful and extensively circulated Magazine for March, I observed a letter written by Col. Alexander Hamilton, of New York, embracing a variety of subjects, and trusting to your well known liberality, I have ventured to discuss some of the more important points contained in it. I pass over the mere political part of the speculation, as being of little or no importance to the merchant or political economist, and proceed to discuss the views of the writer upon the Sub-Treasury and the Tariff. With regard to the Sub-Treasury, the Colonel has the following remarks:—"To what end, and for what purpose, should we get rid of the Sub-Treasury. It has thus far, with all its faults and trials, done its duty faithfully;" and then goes on to show, that by its restraining and conservative influence upon the currency, it has conferred immense benefits upon the country. After such admissions, I must confess I was not quite prepared for the following paragraph:—"If the head of the Treasury

should be authorized to check freely on deposits, to discharge the indebtedness of the government, or to transfer credits to suit the convenience of the department, the Sub-Treasury system would be relieved of an important embarrassment. And if to this should be added the issue of certificates of deposit to the public creditors, the admission of transferable credits on the books of the Sub-Treasuries, every facility would then be afforded, in accommodation of the legitimate business of commerce. In these simple modifications, there would be no material increase in the volume of circulation, while the specie, in deposit with government, would be more advantageously and conveniently represented; and being so relieved, the substantial objections to the system would be essentially removed." And in a paragraph almost immediately following, the Colonel most truthfully shows how the Sub-Treasury system operates to restrain the currency within the limit of a healthy state. Now, sir, if every-day experience did not remind us of the circumstance, that well informed men upon the statistical details and operations of almost all subjects are constantly making erroneous and illogical deductions from such facts, we might have been surprised that a gentleman of Col. Hamilton's information should have suffered himself to do so. While he shows that the Sub-Treasury system has done *that* which no other governmental regulation has been able to effect, a safe and healthy currency, he wishes that this regulation should be relaxed. This is certainly, to say the least, illogical. But then he says, "In these simple modifications there would be no material increase in the volume of circulation." Now, if this were the case, there would, of course, be no material relief; however, whatever amount of relief it afforded, would certainly be only of a temporary character. But what does the Colonel say has prevented "a wild scene of ruinous extravagance," under the importation of twenty millions of dollars in specie?—the very system which he wishes to be relaxed. He says, "If the head of the Treasury should be authorized to *check freely* on the deposits, to discharge the indebtedness of the government, or to transfer credits to suit the *convenience* of the *department*, the Sub-Treasury system would be relieved of an important embarrassment." I apprehend the Colonel meant *the convenience* of merchants engaged in importation. What is this but destroying the beneficial power of the system? Your correspondent acknowledges that the withdrawal of the specie from the banks is the conservative power which renders accommodation more difficult, and consequently checks importation; and yet he recommends that this conservative power should, as far as possible, be neutralized, by immediately setting at liberty as much of this specie as might be owing to public creditors on the one hand, (whether due according to contract, or the usual routine of business or not,) and on the other, by a transfer of credits, lessening the amount required to be withdrawn from the banks. If we should submit to this, I am afraid it would place us much in the same position as the man who had a kettle to mend—while we endeavored to stop one hole we should be apt to make two. In another part of the letter your correspondent admits that a vacillating policy "leads to inevitable mischief;" and I think it is a pity he is not willing to make this maxim practical in the case of the Sub-Treasury. But let me ask, Why is this maxim of such universal acknowledgment as he says it is? Simply, because experience has proved that an indifferent, or even a bad regulation, is better than continual change. If a law or regulation be not absolutely wrong in principle, circumstances soon accommodate themselves to it—it being certain and permanent, energy and enterprise will soon overcome all difficulties.

No doubt merchants will complain when they see so much specie locked up in the coffers of the government, when *they* cannot obtain sufficient to remit to their creditors; but then such a time must always come to the *improvident* whether under the Sub-Treasury system or not. If further evidence were necessary why the Sub-Treasury system should not be altered or relaxed, the Colonel has himself furnished it gratuitously. He says, "This dependence upon the current of exchanges has ever proved fallacious." (That is, with regard to the state of the bullion market.) "When they are supposed to be favorable, they immediately lead to bank expansions," &c. Now, without subscribing to the doctrine contained in the former part of this quotation, I submit that that contained in the latter is the best reason in the world why there should be no relaxation of the Sub-Treasury system. When the state of the exchanges is such that bullion is flowing into a country, (and I believe there is no exception to this rule,) instead of allowing it to take its natural course of being partly absorbed in the currency, and partly returned to those countries from whence it came until an equilibrium is again produced, the bankers, ever ready to seize an opportunity of making profit, push out their paper until the extreme plentifulness of money excites a disposition to speculate, and prices rise. Then comes the influx of foreign merchandise, until the exchanges are over balanced; and when this is the case, it is too late to remedy the evil. The Bank of England, with all the gigantic power of its monopoly, has never yet been able to control, effectively, the currency of Great Britain. Monetary panics are continually occurring; and it has often been found, when the bank has been doing all it could to withdraw its own paper, that the provincial and joint stock banks were increasing their issues. In the year 1839 an extraordinary drain of bullion took place in England, through the deficiency of the crops; and under the influence of the grain monopoly, a draft of seven millions sterling was made upon the coffers of the bank in three months, and she was obliged to borrow two and a half millions from the Bank of France to save her credit. During this time, joint stock and country banks were either not curtailing their issues at all, or were actually increasing them. Since then alterations have been made in the bank charter, and other restrictions applied, but, as it appears, without success; for, in the Parliamentary sessions of 1848, great complaints were made of the operation of the new law, and I believe a committee was chosen to examine into its operation. Many schemes and propositions are at present afloat in England for the emendation of the currency. Among the newest, propounded by the Currency Reform Association, is one for the hypothecation of consols as the basis of the currency; and it is proposed that the notes of this currency (from one pound sterling to a thousand) shall be the only legal tender in the kingdom. What other wild and visionary schemes may yet be proposed for the emendation of the currency* of Great Britain, it is hard to say; one thing is, however, certain—great dis-

* The hypothecation of State stocks, or even land, can never be made effectual for the substratum of a currency. The value of the one is entirely arbitrary, and fluctuating; and the value of the other depends upon contingent circumstances. A currency of this kind may also be increased *ad infinitum*. They neither of them contain the element of labor—the *only* criterion of value. The precious metals appear to be the only articles pointed out by Nature as a circulating medium. They must of necessity approach nearer than any other articles to an equal value in all countries, and at all times, on account of their portability and compactness. Much speculation has lately been entered into, to show that the precious metals do not depreciate with increased production. There does not appear to have been much cause for this, for it is perfectly plain that their value, in relation to other commodities, cannot vary greatly; they are, therefore, the fittest articles to measure other values. Who would go to California, or anywhere else, to get gold, if he could get more food and raiment by working at any other calling, for the same period of time?

satisfaction prevails at present upon the subject. A new joint stock bank is also proposed to be chartered in London, upon the Scotch system, and is to be much more liberal in its accommodation to the public than any bank heretofore established. It is to take the savings of the public in deposit in any sums not less than five pounds sterling, and allow interest thereon from day to day; but, if it should at any time lose one-fourth of its paid-up capital, it must wind up its affairs, as its charter will be vitiated. When will the world cease to be gulled by this system of attempting to get something out of nothing? In the present state of commerce, it is obviously impossible to keep a larger relative amount of money (or convertible paper) in circulation in one country than another, and if paper be issued which is not convertible it must depreciate. In either case, if it be issued in excess, the honest part of the community will be robbed for the benefit of speculators, gamblers, and bankers. Colonel Hamilton, however, like most other currency doctors, is consistent in one thing—he advocates the protective system of commerce. *Free trade*, and a mere *local* circulating medium, are certainly incongruous and incompatible. In the present state of the world, what every country wants is a currency of universal value and estimation—one that can neither be increased nor diminished at pleasure, or for the interest of any party; and one, also, which will not only stand the wreck of individuals, but of governments. Until this is the case trade can never be perfectly free, nor comparatively steady, which is the great desideratum. It is high time that mankind ceased to make laws to thwart the principles of Nature and the decrees of Providence. But to return to my subject. There is now no reason why the Sub-Treasury act should be altered, any more than there is that the British national debt should be paid off. The specie having been absorbed, and the currency settled, it can injure no one to allow it to remain, and benefit very few to resume it. The community would rather be injured than otherwise by resumption, for in the end it must be exported without any return. We had, therefore, better allow the Sub-Treasury act to remain, in its integrity, a part of the Statutes of the United States. The former experience of our own country, as well as the confusion in which the currencies of others are at present involved, ought to teach us to be content, without attempting to amend that which has already operated better than its proposers and supporters had dared to expect. The present is a most favorable opportunity for all governments, who wish well to the communities over which they govern, to prepare for the final withdrawal of all bank paper from circulation under the amount of one hundred dollars, and to supply its place with the precious metals.

Let us now turn to the subject of the Tariff. In treating upon this subject, Colonel Hamilton appears to repose as much confidence in the protective system as though he had been writing more than fifty years ago; before Smith, McCulloch, and others, had so thoroughly exposed its fallacy. After acknowledging that the revenue and the commerce of the United States have been increased under the Tariff of 1846, and stating that "the foreign exchanges evince a balance of trade in our favor," and also, "that almost every shipment made to the United States is extremely profitable," &c., he goes on to say, "In order to be entitled to a wish, on our part, for the continuance of this peculiar state of our foreign commerce, we ought to be satisfied that there exists a perfect reciprocity. It is not enough, that those who are immediately engaged in the business of importation, are making successful speculations." Well, sir, is not this sufficient? If our merchants

get a profit, I should like to know how they obtain it without equally benefiting the community. We have again the old fallacy put forth, that the rights of the community and the rights of the individual are separate, and independent of each other. This is the true doctrine of protection; but let us see how far it would carry us! If one individual has a right to protection, separate from the common interest, all individuals have. This reminds us of some of the mechanical trade regulations in some parts of Europe, where an individual must be apprenticed a certain number of years, then he must travel for experience so many more, and finally he may set up in business, by and with the consent of the majority of masters, in the town where he wishes to reside. If the manufacturing interests have a right to protection, the farming interests have also a right. If the manufacturing interests require a duty upon foreign manufactured goods sufficient to protect them from competition, ought not the farmer, in justice, to be allowed a bounty upon the exportation of his produce sufficient to enable him to sell it in a foreign market? And what would this amount to? Just no protection at all; but a burden, and an intolerable nuisance, which all civilized governments are hastening to throw off. But I apprehend the Colonel has no intention of carrying individual rights so far, though he cannot deny that this is the legitimate result of the principle laid down—he would only protect the manufacturers at the expense of the rest of the community. The Colonel complains much of the prostration of American manufactures in all branches. This probably cannot be denied, but the Colonel attributes it to anything but the right cause; and, what is more singular still, he says the *agriculturists, farmers, and planters*, are suffering in a corresponding manner. This is, indeed, paradoxical. It cannot be from the withdrawing of protection from the agricultural interests, or from the increasing exportation of breadstuffs; we are therefore at a loss to know to what to attribute it, except to the importation of the \$20,000,000 which the Colonel mentions in the former part of his letter. The Colonel refers us also to “the state of commerce previous to the passing of the act of 1842,” and says, “we shall discover our foreign trade to have been precisely the counterpart of that which is now officially esteemed an extraordinary state of prosperity.” Now, if we examine this subject closely, it is probable we may find sufficient cause for the depression of manufactures, without attributing it altogether to the alteration of the Tariff. To assert that American manufacturers are incapable of competing with foreigners, under the present Tariff, is something like a confession that the consumer is taxed somewhere about twenty-seven per cent upon the average on all the manufactures consumed—a pretty fair protection to a small part of the community at the expense of the rest. The experience of the world has proved that thirty per cent is as high a duty as almost any kind of manufactured goods will bear—prohibitory duties have always proved inoperative and ineffectual in cases of active demand, simply because the duty was too tempting a profit for the smuggler to resist. But to our point. In looking over a list of British exports for the ten years ending 1846, we perceive that previous to '42 the amount is extremely fluctuating, but since that period they have been steadily and constantly increasing, as also have those of the United States. This can, however, be easily accounted for. Great Britain is the largest commercial and manufacturing nation in the world, and consequently consumes large quantities of *foreign* raw material, as well as of the commoner kinds of agricultural produce. It is obvious, therefore, that her minutest commercial and financial arrangements will be

felt throughout the world; especially in a country so intimately connected, and carrying on such an extensive commerce as the United States. Taking these circumstances into consideration, and looking carefully into the whole subject, there can be no doubt that the British protective system has not only been a great evil to herself, but also to the world in general. For four years following 1832, she scarcely imported any grain—probably not more than a few thousand quarters—the price of grain being lower in Great Britain in the year 1834 than it had been for fifty years previous; but in '37 and '38 a greater demand sprang up. But in 1839, circumstances occurred which caused an immediate and extensive demand for foreign grain, so that the Bank of England was drained of her specie in three months, and the greatest financial derangement occurred. We may, therefore, clearly set down these fluctuations to the unequal operation of the British Tariff. In 1842, Sir Robert Peel began his innovations upon the protective system. He made extensive reforms, but nevertheless left untouched the laws which regulated the importation of grain. But what Sir Robert Peel left undone with regard to this matter, a succession of failing harvests accomplished for him. The necessity of importing grain continued to increase until the year 1846, when the duties were reduced one-half, and a law passed that they should finally cease in the present year. England has therefore continued to augment her imports of grain, raw material, and other agricultural products, up to this time; and according to the principles of political economy, as she has enlarged her imports, she must of necessity have enlarged her exports. Let us now inquire into the operation of our own Tariff. We find that both imports and exports have steadily increased, even under the Tariff of '42, and up to this time. How then can it be said, that the Tariff of '46 has caused this increase of importation? If it be said that a much larger increase of importation has taken place under the present Tariff, then I answer, that a much larger exportation has also taken place. But to prove that our present Tariff is still too high, instead of too low, and is therefore not to be blamed on that account for the large importations of manufactured goods, and the general prostration of trade, we have only to refer again to your correspondent's letter. He says we have imported \$20,000,000 in specie. Now I think that this could hardly have occurred, if the Tariff had been merely a revenue Tariff—at any rate, things could not have been worse, and probably might have been better. But let us inquire what has been the consequence of this importation of specie? Let us refer to your number for April, (page 421.) We find there, that in the face of an increased importation from Great Britain of 82,000,000 of yards of cotton goods in the years 1847–8, that the American manufacturers also increased their consumption of cotton 135,000 bales for the same period, and “the prices of both raw material and fabrics are now rising under a still greater production of cloths.” Under these circumstances, it appears difficult to suppose that the Tariff of 1846 has had anything to do with producing the general prostration of trade, of which Colonel Hamilton complains. It would be more logical to suppose, that the importation of twenty millions of specie had inflated the currency, at least to that extent, and had tended to produce an increased amount of manufactures, without producing a corresponding amount of consumption. That the present Tariff is too high, instead of too low, for the general interests of the community, we have unmistakeable evidence. According to *Burn's Commercial Glance*, quoted in your Magazine, there was a decrease of the exports of plain calicoes to the United States, in the year 1848, of 24,000,000 of

yards; but it is accompanied with this remark, that the "Americans *now ship* from this country direct for China." This is a short, but very pithy remark. As straws indicate the course of the current, so do small circumstances indicate the course of those which are to follow. An indirect, or round-about trade has already commenced, and is one of the legitimate results of the protective system. If American manufactures cannot live without a protection of thirty per cent, it will soon be found that they cannot prosper with it. England, in addition to cotton, will continue to consume large quantities of our breadstuffs, as well as other kinds of agricultural produce; and of course this must be paid for. If the Tariff were increased, or even the present rate of duties continued, we must expect a cessation of our export trade in manufactures, as well also as we may expect to *import a few* now and then. Whenever the state of the exchanges is favorable for the operation, our merchants will export goods direct from Great Britain, to pay for whatever foreign produce may be necessary for consumption in the United States. We shall also, as I have intimated, be frequently inundated with foreign manufactures in our own markets, whenever the failing harvests of Europe shall make it necessary to import a larger quantity of breadstuffs, and consequently derange the distribution of the precious metals. We ought therefore to prepare for a thorough *free trade*, rather than an increase of duties. If we are to have manufactures, they ought to be allowed to grow up without protection, that they may be strong and healthy, and able to bear competition; and not like the sickly, pampered child, drag on a precarious and miserable existence to no purpose.

The abolition of the British Corn Laws may be looked upon as a new era in commerce—all other protective systems must give way; or can we suppose that Great Britain can continue to import five or six millions of quarters of grain without making any impression upon the commerce of other countries. The German manufacturers were, many years ago, perfectly aware of the importance to their interests of the continuance of the British Corn Laws. A writer in the *Augsburgh Gazette* acknowledged that their continuance was the greatest possible boon to the German manufacturing interest, because, as no limit could be placed to the consumption of foreign raw material and agricultural produce by Great Britain, no limit could be placed to her competition with the manufacturers of other nations. Those who advocate the protective system should be prepared to show, by the experience of other nations, how it can be profitably, or *possibly* carried out. Are they willing, like France, to organize the most complete and comprehensive revenue service, (male and female,) and require passports, and search the *person* of every individual who may land upon our shores, and to keep a sufficient number of revenue officers to attend the manufactories, to place an indelible mark on every piece of goods manufactured in the country, and oblige the dry goods merchant to keep that end of the article until he has sold the whole piece, to show to any person who may require it that it has not been smuggled? But what of all this? Has it succeeded in making France prosperous and happy? No! considering her soil, climate, and state of civilization, she is one of the poorest clothed and fed nations of Europe. Did it prevent smuggling? Certainly not. It was easy to imitate the revenue mark, and smuggling went on as usual. Napoleon decreed that no British goods should be imported upon the continent of Europe; but with all his power, he failed to accomplish his design of destroying English trade. Some of his own officers were detected in a participation of the profits of

smuggling, and English goods still bearded him in the shop windows of Paris, until, finally, he was obliged to rescind his resolution. There appears to be only one way in which the protective system can be made anything like effective. If you *export* you must *import*; therefore, to be consistent, all exportation ought to be prohibited, or prevented as much as possible by high export duties. Austria, to encourage her manufacturing system, taxes her exports of raw produce, and yet she imports large quantities of British manufactures, and smuggling is constantly going on. Her manufactures do not flourish, and they have at times shown evident symptoms of decline; and there can be but little doubt, now that a constant market is opened for her agricultural produce, that an extension of cultivation will take place in spite of export duties. There are several other points in your correspondent's letter which I should like to notice, but I fear this letter is already too long for your convenience, and, it may be, for the patience of your readers. I will therefore close with one other remark. The Colonel hints that *free trade* is an abstraction, and talks something about encouraging *foreign* capital and labor. I should have thought that these things had been settled, at least in the minds of all intelligent people. All commerce is founded upon the simple principle of the superior profit and increased production derived from the *division* of labor; and *free trade* is nothing more than the universal application of the principle. As to employing foreign capital and labor in preference to our own, I should like to see it explained how we are to import the productions of foreign capital and labor without paying for them in the productions of our own.

I remain, dear sir, yours respectfully,

RICHARD SULLEY.

Art. VI.—COMMERCIAL SKETCHES WITH PEN AND PENCIL

THOMAS PRENTICE KETTELL.

[WITH A PORTRAIT.]

PERHAPS no single individual has contributed more to the financial literature of the country, or exerted a more extended influence through the practical application of sound principles of political economy to passing events, than the gentleman who is the subject of this sketch. Possessed of prompt and vigorous reasoning powers, of clear perception and rare sagacity, he grasps the essence of any subject that presents itself with singular facility; and through his rapid, bold, and vigorous style, flings his powerful conceptions before his readers with a clearness and force that always carry conviction. His writings for the last ten years have formed an invaluable running commentary upon the stirring events that have transpired in the remarkable decade, which, commencing with the general suspension of 1837, was marked, through the terrible nature of the revulsions that followed, by an entire change in public opinion in the United States, in respect to commercial and financial principles, and have identified the writer with the soundest political economists of the country. As of late there seems to have developed itself a taste for genealogical sketching, always of value in illustration of the progress of events in our rapidly advancing country, we have collected from many curious genealogical books, lately published in New England, a few facts in relation to the New England ancestors of Mr. Kettell.

History affords us but meager memorials of many of the worthy founders of New England—a few dim outline sketches, which the imagination must fill up. But few become so distinguished as to have their names transmitted with honor to posterity; yet, in one sense, the founders of New England were a distinguished race, so that no ordinary interest is attached to slight details illustrating their character, standing, and fortunes. They were the flower of that strong-minded and intelligent race of men, whose determined patriotism wrought out the first revolution in England, and commenced that series of governmental reforms, which has permitted Great Britain to pass, by gentle transition, from the state of feudal tyranny to representative government, while other nations of Europe underwent no such preparation until the sudden shock of inevitable reform was nearly fatal to civilization. The institutions those men founded in New England, stand before the world as models of human wisdom. They are the same that they sought to establish in England, and which, but for opposing priestcraft and aristocratic interests, would have placed the people of England at the present day in as enviable a condition as are those of Massachusetts. The working of the democratic representative system in the New World was untrammelled by any conflicting and long existing aristocratic privileges. It was put in motion by the bold, sturdy, and simple-minded men, with whom independence was a paramount object. As they grew in numbers, preserving their industrious and simple habits, the system of government they adopted developed itself in a manner to leave scarcely anything to wish for, and some details of their habits and condition are of general interest.

Foremost among those bold adventurers, who sought in the wilds of the New World a refuge from hierarchical and aristocratic oppression, were the ancestors of Mr. Kettell, and it appears also that this impatience of oppression was no new-born feeling with the race, which was of the oldest in England. According to the old chronicles, Ulf Ketel, who succeeded to the Saxon earldom of Norfolk in 994, was greatly distinguished for his valor in encounters with the Danish invaders. A branch of his descendants were possessors of the ancient barony of Kendal, and various localities in England take their names from the descendants of this Saxon earl. Thus, near Glanford, in Lincolnshire, is Kettleby, the seat of the family of Tirwhitts. This place is said by Camden to have been founded by one Kettell; the word *bye*, in Saxon, signifying a habitation. There is also a Kettleby-upon-Eye, Leicestershire; Kettle's Hulme, Chester; Kettleston, Norfolk; Kettlethorpe, Lincoln; Kettle, Fifeshire, &c. The frequent occurrence of this name indicates the extended influence of the family not only in England, but in Scotland and Ireland. A coat of arms, recorded in the Herald's office, London, quartered with the armorial bearings of Lord Hill, was granted, 1570, to John Kettell of Kings, Langley county, of Hartford. It would seem, from the various glimpses that history gives of the name from time to time, that it was always found among those who were in resistance to oppression, or to undue assumption of authority; and this sturdy disposition, manifest in the Saxon Ulf, developed itself fully at the time of the English revolution. Camden's *Annals of Ireland* records, as far back as 1325, that the lady Alice Ketyl was cited to appear before Richard Lederede, Bishop of Ossory, upon the charge of holding "heretical and perverse opinions," and all of the race were included among those democratic Puritans, who, never misled by names, were as little satisfied with the despotism of the Protector as of the legitimate ruler. Accordingly, in 1634, Richard Kettell, then twenty-five years of age, with his wife,

arrived in Charlestown, Massachusetts. In the following year his name appears on the records of the first church in that town as a member; and for two hundred years afterwards the name, as borne by his descendants, appeared on the same records in succession. His name is also found among the selectmen of the town. From his will, recorded in the Middlesex Probate Court, October, 1680, he appears to have been possessed of an estate of £300, a fortune which, in those days, was accounted considerable, and which is above the average returns of wills in the ancient records of Middlesex, forming a very good index to the comparative wealth of the early colonists. He was clearly one of the most substantial of those fearless, resolute, persevering and thrifty planters of New England, who, amidst privation and danger, laid deeply the foundation of the present and prospective glories of the republic. His oldest son, John, with his wife and two sons, were taken prisoners from a garrisoned house at Lancaster, in King Philip's war. The second son of Richard was Joseph, born 1641, and who was married July, 1665, to Hannah Frothingham, (Frothingham,) by whom he had fourteen children; of these William was born 1680. He remained a citizen of Charlestown, where he was married and had six children; of these, William, who was born 1715, married Miss Ruth Stimpson in 1737. From this union resulted twelve children; and it may be noted as a singular instance of longevity in a family, that the whole of the twelve children followed their father to the grave in 1767. The family was then broken up. The members, scattered over the whole Union, many of them engaged in the war of independence, but were re-assembled, and the whole twelve followed their mother to the grave in 1807, forty years after the burial of their father, and one of the twelve still lives. Joseph, the third son of William, was born November, 1740, and in 1770 married Rebecca, daughter of the Rev. Thomas Prentice.

This gentleman was born in Cambridge, Mass., in 1702, and having graduated at Harvard College in 1726, was ordained at the church of Arundel, District of Maine. Ten years after, the settlement being dispersed by the Indian hostilities, Mr. Prentice returned to Charlestown, and was settled as pastor of the first church at that place, where he continued to preach until the edifice was destroyed at the battle of Bunker's Hill. When the tide of battle rolled away, a log hut, erected on the ashes of the church, served to continue the worship; but Mr. Prentice was too advanced in years to struggle against surrounding difficulties. In 1746 he had married Miss Rebecca Austin, of Charlestown, by whom he had a daughter, Rebecca, who, as mentioned, married Joseph Kettell in 1770, and died in 1825, having survived her husband ten years. From this marriage resulted five children. Of these, Thomas Prentice, named after his maternal grandfather, born October, 1774, and died in 1843, was the eldest; the others were Rebecca, married to the Hon. Amasa Stetson, a gentleman distinguished for his patriotic services, while United States Commissary, in the late war with Great Britain, and in the Massachusetts Senate, of Dorchester, Mass.; John, a merchant of Boston; Maria, widow of Enoch Brown, Esq., an eminent lawyer, of Bangor, Me.; and Charlotte, married to Nathaniel Freeman, Esq., of Boston.

Thomas Prentice Kettell was married, in 1808, to Miss Hannah Dawes, daughter of Joseph Peirce, Esq., of Boston. Among the earliest settlers of Boston was Mr. Peirce's grandfather, and himself was born in 1745, being one of eight children. Three of the brothers of Mr. Peirce entered the army when the smothered indignation of the people burst into active resistance to the encroachments of the British crown, and all signalized

themselves in the service of their country, fertilizing the fields with their blood. Major Isaac Peirce was aid-de-camp to Gen. Gates, and was present in that capacity at the surrender of Burgoyne. Capt. John Peirce, a member of the Society of the Cincinnati, died at Fort Adams, Walnut Hills, Georgia; and Lieut. Hardy Peirce was killed in action at Fort Lee, November 5, 1776. Mr. Joseph Peirce, although a merchant of Boston, had, prior to the outbreak of the Revolution, organized a company of grenadiers, which he continued to command with Henry Knox, afterward Gen. Knox, as lieutenant, down to the day on which the tea was cast into Boston harbor. The grenadier corps was one of the finest in the colonies, and being drawn up in State, then King-street, to receive the new Governor Gage, on his arrival from England, elicited from that officer the remark that "he did not know his Majesty had any troops in America"—a compliment to the soldierly appearance of the corps long cherished by its officers even when patriotism had led them to oppose the king's troops. Capt. Peirce was in charge of the tea ships as guard on the night previous to the appearance of those world-renowned "Indians," of whom his brother John was one. That event brought about the dissolution of the corps; but the friendship then formed between Gen. Knox and Mr. Peirce existed uninterruptedly to the death of the former, in 1806. When Lieut. Knox, impelled by his glowing patriotism, sought to join the army of Washington, then at Cambridge, preparatory to the fight at Bunker's Hill, he had some difficulty in escaping from Boston, but he was enabled to do so through a permit obtained by Mr. Peirce for a chaise to pass the lines on Boston Neck. As he took leave of the future general, the latter remarked, "My sword-blade is thrust through the cushions on which we sit, and Lucy (his wife) has the hilt in her pocket." The subsequent career of Gen. Knox is part of the history of the country. In 1771 Mr. Peirce had married Miss Anne Dawes, a daughter of Col. Thomas Dawes, who was one of the most distinguished gentlemen of his time, not merely for considerable wealth, but for many valuable qualities that his public spirit devoted to the public service. Being descended from Puritan ancestors, he retained their principles, and, in some degree, the outward severity of their manners. His taste having led him to the study of architecture, he became eminently successful, and many of the existing public buildings of Boston, including the State House, afford memorials of his talents. He represented Boston in the Massachusetts Senate for twenty-four successive years, and, as president of that body, exercised executive authority on the death of Governor Increase Sumner, there being then no lieutenant governor, after which he retired from public office in the full exercise of his faculties.

Through the union with Miss Dawes, Mr. Peirce had five children. Joseph, the eldest, was born in 1778, and his eldest daughter, Frances, was married to a son of the late William Grey, of world-wide mercantile reputation. Hannah, the second daughter of the union with Miss Dawes, was married to Mr. Thomas Prentice Kettell, the immediate father of the gentleman who is the subject of our notice. Mr. Kettell the elder was long known as a merchant of Boston, and highly esteemed by all who held intercourse with him. By his marriage with Miss Peirce he had four children, of whom the eldest, Joseph, born 1809, was of a highly intelligent mind and great natural abilities; but, owing to extreme delicacy of health, was unable to engage in any regular profession or business, yet, by his amiable qualities, endeared himself to all. He died at St. Augustine, Florida, whither he had gone in pursuit of his health. The second, Thomas Prentice, of whom we treat, was

born 1811, and is now in his 39th year; George Frederick, at present pastor of the Vesey-street church, New York; and Anne, married to W. S. Brown, of Cincinnati, Ohio.

Mr. Thomas Prentice Kettell, educated in Boston, early evinced a taste for commercial pursuits, and when quite young accompanied his father on several trading voyages, which enlarged his views and improved his understanding of the operations of general commerce. On leaving school he entered a wholesale hardware store in Boston, where he continued for many years, until his desire for more extended operations induced him to visit Europe. After engaging in many extensive operations, and visiting most of the capitals of Europe in the investigation of the course and general operation of international commerce, with the view to reconcile the practical workings of trade with the general principles of the economists, he returned to this country, and took up his abode in New York at a most interesting period. It was at a time when his natural qualities, enlarged and matured by extensive observation and untiring research, enabled him to appreciate with great accuracy the position of financial affairs throughout the world, and particularly the unhealthy state of things which existed in this country.

The colonial origin of the United States subjected them to many inconveniences, that could not be cast off as easily as the political connection with the mother country was severed. The policy of the mother country, by forbidding manufactures, restraining trade, and imposing restrictions, had prevented the growth of capital in the colonies, and created a commercial and financial dependence far more difficult to shake off than the political allegiance. The appointment of governors, who were to carry on a government amid a dissatisfied people, in some degree compelled the issue of paper money in the shape afterwards prohibited to the States as "bills of credit." Notwithstanding the immense evils that flowed from the use of such a circulating medium, the paper credits became so interwoven with the business of the people, and the dependence on England for capital so complete, that the confederate States were held in complete bondage to the money power of England for half a century after her statesmen had lost all political control over the colonies. The Constitution of the new States prohibited "bills of credit," because experience had taught statesmen the immense evils that flow from their use; but the issue of paper continued under various changes, always with the same result. When the United States ceased to issue bills of credit, it delegated the power to a National Bank, and the individual States delegated to corporations of their own creation a right of which they had themselves been deprived. As the paper schemes changed their aspects they acquired a short lived favor, and not a few honestly believed that the prosperity of the country was owing to these paper credits, which had so long preyed upon national and individual wealth. The time was approaching, however, when the United States were to be relieved from financial vassalage, as they had sixty years before been emancipated politically.

The leading events throughout the commercial world in the seven years ending with 1837, conspired to expand commercial credits into an unusually fragile and dangerous bubble, which, amid the greatest apparent prosperity, tended gradually, but inevitably, to an explosion. England, being the money center of the commercial world, or the point where balances resulting from the transactions of nations are ultimately settled, always exerts a powerful influence upon the general state of financial affairs. When her crops are good, and her industry prolific in materials of commerce, she is liberal in

credits to dependent borrowers, and does not enforce that prompt settlement of balances which becomes necessary when a short harvest diminishes her resources, or a limited yield of raw materials deprives her of the usual profits that her great capital, matured skill, and central position enable her to command for manufactures. For many years subsequent to the great explosion of 1825 her capital was becoming more abundant, and her liberality to the borrowing traders of other nations apparently increasing as their demands became greater, and the world became heavily indebted to England. Capital left her shores for employment in all parts of the world; and the impulse given to bank credits in 1832, by the law re-chartering the Bank of England and encouraging the creation of joint stock banks, followed by the large payments in 1834 for West India slaves, so accumulated credits at home and promoted the already large efflux of capital, as to act very perceptibly upon those infallible indices, the bullion in the bank and the state of the exchanges, both of which gave warning of an approaching storm even during the last series of abundant harvests which the soil of England has produced. In 1836, the necessity for curtailing foreign credits forced itself upon the notice of the money power. Simultaneously with this process in England, the feeble fabric of credits in the United States was tottering to a fall. In 1828, on the accession of Gen. Jackson to the Presidency of the Republic, the first intimation was given that the democratic party would in no event suffer the renewal of the charter of the National Bank, which was to expire in 1836. As colonial experience had taught the first Congress the evils of bills of credit, so had fifty years of independence convinced the public of the pernicious effects of bank credits. From that time the institution, as its returns indicate, sought to extend its influence, in opposition to the government, by the rapid expansion of its loans, an operation greatly facilitated by the situation of affairs in London. In New York, also, the safety fund banking scheme, projected by Mr. Van Buren as a part of the machinery by which political power in the State of New York was controlled, was put into operation, and the bestowal of charters for political services caused bank capital, in the ten years ending with 1836, to increase from \$16,132,140 to \$37,182,000 in the State of New York alone. The liberality of foreign credits, the operation of the National Bank, and the rivalry of the safety fund banks in New York, gave such an impulse to bank speculation as raised the aggregate bank capital of the Union from 145 to 350 millions. More than \$200,000,000 of capital rolled from east to west, mostly spreading in the fertile valleys of the Mississippi and its tributaries. All business was consequently on an unsafe footing. Speculations were rife, valuations extravagantly high, and the most improvident system of credits by persons with inadequate capitals everywhere prevailed. In this unsound state of the public mind Mr. Kettell clearly discerned the true condition of affairs, with the inevitable consequences. Up to that time the public press had never systematically followed commercial events, or exerted itself in the advocacy of economical principles distinct from party politics; Mr. Kettell therefore determined, in a series of practical articles, gradually to expose pernicious causes, and to indicate judicious remedies. To find a channel of communication was no easy matter, as none of the journals of the day felt themselves at liberty to attack existing abuses without distinction. It happened, however, that the *New York Herald* had been in existence for some two years, and enjoyed a certain reputation for independence, although, from the objectionable matter admitted editorially, it commanded little influence. Mr.

Kettell, however, commenced in that paper, under a distinct head, an exposition of the monetary affairs of the country. These displayed an ability that soon attracted general attention not only throughout the United States, but in all commercial cities of the world; and during six years, down to the close of 1843, they acquired an almost oracular authority.

As an indication how speedily a strong and original thinker will impress his identity upon the public mind, we will here insert a few extracts from a huge collection of papers and Congressional speeches, at that time. It will be observed that Mr. Kettell's name was never before the public; but, on the other hand, the paper in which his writings appeared frequently took occasion to claim for its proprietor the paternity of the articles; yet it will be seen from the extracts how unerring is public judgment. The annexed extract is a part of the remarks on the Money Market in the *New York Herald*:

"We know not who is the writer of the series of remarks on that subject, which appear in the Herald, nor do we pretend to be deeply instructed in the mysteries of finance, currency, banking, and political economy; but a friend, who we believe to be familiar with these topics, has suggested the propriety of republishing the extract which follows. We also know that some of the most intelligent merchants of this city have spoken of this series of essays in the Herald as the productions of one who has an extensive knowledge of the mercantile and monetary affairs of the country, and a mind of uncommon shrewdness in observation."—*Boston Courier*, 1840.

"* * * Bearing these principles in mind, he would ask the attention of the House to some statistics. He presented the following table, which he said was taken from the Money Articles of the *New York Herald*, which were written with an ability which the whole country acknowledged."—*Speech of Mr. Bayly, of Virginia, March, 1842.*

"Upon this particular point I will say nothing more than to read an extract from one of the Money Articles of the *New York Herald*. But I cannot do this without remarking, in justice to the author of those articles, that for a year or two past they have, in the general, displayed a very uncommon industry and ability, and greatly aided in displacing error and exposing the frauds and corruption with which the country has been so long afflicted through its corporations, its currency, its stockjobbers, and paper mongers."—*Mr. Allen, of Ohio, 1842.*

"The writer of the Money Article of the *New York Herald*, the country should know, is not the editor of that print. He is a man of principle, of judgment, of information. His views of the new Exchequer scheme are characterized by honesty and patriotism, and by the judicious and practical considerations which have given so much deserved weight to his notices of the monetary concerns of the country."—*Washington Globe, 1841.*

"But, sir, I will read an authority on this subject. I call the attention of the House to the following article from a New York paper, under the head of 'Money Market.'"—*Speech of Mr. Snowden, of Pennsylvania.*

"We have made an extract from one of the Money Articles of the *New York Herald*, the writer of which is confessedly one of the most judicious and discriminating observers in the whole country."—*Macon Messenger, (Clay paper.)*

"We had intended, in anticipation of that event, to have gone into an elaborate and full examination of that measure; but are most fortunately saved the labor of doing so, by the able and well-timed article which we give in another column, from the *New York Herald*. We thank the editor of that paper, and particularly the writer of this article, and we trust our readers will thank him too, for his surpassingly clear illustration of the effect which that very specious but more mischievous measure will have on the interests and business of this country. He has said just what we wished to say, and better and in fewer words than we could have said it. We hope not one of our readers will fail to give his article an attentive perusal."—*Portsmouth (Va.) Chronicle, 1842.*

"A perusal of the statistics and other facts gleaned by the accurate and able

writer of the Money Articles of the *Herald*, will render it manifest that Mr. WEBSTER has not only misrepresented the state of our trade generally, in pretending that it had suffered from the want of care on the part of our government, and its failure to put our merchants and shippers on an equality with those of the nations with which we deal."—*Globe, Washington*, 1842.

"But the *New York Herald* has been one of the most powerful instruments in the United States in exposing the frauds, bubbles, and stock-gambling machinery which our fund-mongers had organized in America for robbing the land and labor of that country, as they have robbed this, since the days of Walpole. For correctness of detail, research, industry, sound political economy, and decided talent, the *New York Herald* might challenge a comparison with any daily paper in Europe. Its Money Articles have not yet been equalled on this side of the water; but it is the bold, and able, and honest exposure of the corrupt paper system which those Money Articles contain, and not the wit, levity, and colloquial humor of the *Herald*, which has excited the indignant reprobation of our corrupt money-changers, and their creatures, the *Times, Chronicle, &c.*—*London paper*.

"We recommend the following striking and just remarks, from the Money Article of the *Herald*—which department of that paper would alone redeem it from all the trash that appears in its columns. These *Money Articles* are decidedly the best which are to be found in any of the American papers. They are luminous, able, and, what has especial value in these times, in the midst of a large commercial city, *bold and independent*."—*Richmond Enquirer*, 1841.

"Let us hear what that shrewd financier, who writes Bennett's Money Articles, says on the subject."—*Louisville Advertiser*.

"While our hand is in, we will give two other tables from that masterly author of statistics, who prepares the Money Articles for the *New York Herald*, viz.:"—*Ohio Statesman*, 1842.

"We copy, for the benefit of our readers, the following extract from the Money Article of the *New York Herald*. These articles are among the best, if not the very best, that are written for the American press on the monetary affairs, public or private, of the country. The writer is not the editor of that paper, nor is he a blind partisan, but a clear-headed, honest, and most able collector and disseminator of facts."—*Hartford Times*.

Nearly every member of the United States Senate publicly acknowledged the influence which Mr. Kettell had acquired, through the bold and timely exercise of his genius, at a time when the most experienced merchants were appalled at the extent of the spreading bankruptcies. Amid the turmoil and dismay which seized upon most men in those trying times, he steadily asserted the truth, and clearly designated the goal that must be reached before reaction could be calculated upon.

In that period of time the greatest changes were wrought in public opinion. It is true that the inherent rottenness of the financial system which prevailed would inevitably have developed itself, and involved in ruin its abettors; but, had not the clear and pungent expositions of Mr. Kettell kept public attention fixed upon the general causes that were operating to produce a desolation but too evident to all, the lesson taught in those disastrous years might measurably have been lost upon the public mind. The public had by long custom, supported by the specious reasoning of able writers, come to the conclusion that the theory of Alexander Hamilton, in relation to the necessity of a National Bank, as a means of managing the public finances and regulating exchanges, was indisputably established. Much fallacious reasoning, based upon erroneous premises, prevailed in relation to the theory of the exchanges. The National Bank was regarded as the great regulator, without which, it was firmly believed by many statesmen and eminent merchants, there could be no uniformity or cheapness of exchanges;

and this opinion was supported by the confusion which prevailed in the local currencies simultaneously with the failure of the National Bank. The general suspension of the banks of the Union in 1837 was accompanied by a depreciation of local bank paper, and this was confounded with the rate of exchange. The inability of the National Bank to "regulate," under such circumstances, was manifest to the most obtuse. The high rate of exchange on all points manifested the amount of indebtedness to New York, and the abundance of local promises as compared with actual means of payment. The great majority of persons in all parts of the Union had purchased quantities of goods and property on credit, in anticipation of a profitable rise in values that would enable them to pay. Numbers of persons had consumed the property of others and could not pay. The extent to which this was carried became subsequently manifest in the results of the Bankrupt law passed by Congress. From that it appeared that there were 33,739 applicants for relief under the law, who were indebted in the sum of \$440,934,615 to 1,049,603 creditors. This was by no means the whole number of the insolvents that were made so by the collapse of the credit system. They were only that small portion who were unable to effect a private settlement. All these persons were in debt, in these incredible sums, to banks and merchants, and the country was heavily in debt to Europe. This latter debt was to be paid in produce or specie. The former had become, under the influence of speculative paper issues, too high to export, and the specie being exhausted, there was no resource but failure. The competition for specie to export raised its price, and American gold was 16 per cent premium in New York, sovereigns were worth \$5 47½ each, and sterling bills 22 per cent premium. Neither good exchange nor specie was to be had as a means of payment, and the amount to be paid was very large. At that time the difference between New York and the southern cities was not great, because, as compared with specie, the irredeemable paper of all the States was at about the same degree of depreciation. It was contended that as most of the debts due were contracted in a currency so inflated, that cotton was called 21 cents per lb. and wheat \$2 per bushel, it was ruinous to compel persons to pay when prices were collapsed to the specie standard; and when the New York Legislature compelled the banks of that State to resume in May, 1838, Mr. Biddle, in a strong letter to John Quincy Adams, contended that the high price of exchange was not an indication of inability to pay, but of a scarcity of money, (a rather paradoxical position;) and that the remedy was a continued suspension, in order that people might realize their property at the inflated prices in which they contracted debts. He overlooked the fact that that property was to be gauged by the specie currency of Europe, where the most of our merchants' debts were due. Cotton at 21 cents and wheat at \$2 would not answer to pay debts with in England, and pay day had arrived. If a creditor in New York took cotton for a southern debt at 21 cents, and was obliged to sell it in England at 10 cents to pay his own debts, he must necessarily be ruined. As the importing interest was governed by the currency of England, so necessarily was the consuming interest governed by the same gauge; and the ineffectual struggle made by the United States Bank to sustain proper prices, only resulted in the final extinguishment of some \$200,000,000 of bank capital. It became necessary for New York to resume payment, and, as she did so, the rate of discount on southern exchange continued to rise. In August, 1837, exchange on Philadelphia and Baltimore was par a ¼ per cent discount; in April, 1838, it was

5 a 6 per cent discount; on Natchez and Mobile, 25 per cent discount. The debts of New York merchants were collected in the local currencies, and they had to submit to this enormous loss, the ruinous magnitude of which induced many to call a meeting at the City Hotel to intimidate the New York banks into suspension, in order that this depreciated paper, taken for debt, might be made available in the discharge of obligations. The lapse of time, however, developed the fact, that even the little obtained from debtors was but the *debris* of the bank capital, and all those institutions speedily passed away.

Throughout the progress of these great events, the writings of Mr. Kettell enchaind public attention, and the greatest eagerness was manifest in London and Europe, among those connected with the American interests, to obtain his papers, in which, by the clearness of his style, the perfect mastery of his subject, the fulfillment of his prognostics, the fullness and accuracy of his information, and the clearness of his judgment, he established an enduring reputation.

It may be said that during the commercial and financial revolution which took place, his financial treatises held the same position that did "Common Sense" and the "Rights of Man" in the political revolutions at the close of the last century. The portrait which accompanies this number is an admirable likeness, engraved by that celebrated artist, Doney, from one of Plumbé's Daguerreotypes. Under the management of Mr. Butler, the establishment known as Plumbé's has reached a high state of perfection in that wonderful art.

Mr. Kettell abandoned all connection with the Herald in November, 1843, and of late years has been in charge of the Democratic Review, of which he is proprietor, to which he has given a new character by his monthly financial articles. He is known to the readers of the *Merchant's Magazine* as the writer of a valuable series of articles upon "The Debts and Finances of the several States," now in course of publication, and as the writer of articles in former volumes of this Magazine on the "Commercial Treaties of the United States," &c., over his own signature. He has also, for several years, been the commercial correspondent of the *Washington Union*, over the signature of "Prentice." He is doubtless one of the most forcible writers on political economy in the country, and has done more to impart a respectable character to the tone of the press on that subject than any other. He enjoys vigorous health, is a hearty practical philosopher, very little given to fanciful speculations, and belongs properly to the political economists, rather than to the literary class. He is entitled to a high rank among the economical reformers of the day; a class of men whose labors effect a world of good, while the laborers are scarcely known even by name to those who profit most by their exertions.

ART. VII.—COMMERCIAL CODE OF SPAIN.

NUMBER VIII.

MARITIME INSURANCE.

WE continue our translations from the *Código de Comercio* of Spain. Our present number is the conclusion of the article, the first part of which was published in the number of this Magazine for December, 1848, and treats of Maritime Insurance, (*Marítimo Seguro*.)

CONCERNING THE THINGS BY WHICH THE CONTRACT OF MARITIME INSURANCE IS ANNULLED, RESCINDED, OR MODIFIED.

ARTICLE 885. The insurance shall be null which is contracted upon the freight of the cargo not existing on board, and also upon the gains calculated and not to be realized on the same cargo. These consist of—

First. The wages of the crew.

Second. The amounts taken *a la gross*, or on bottomry loans.

Third. The premiums of loans made *a la gross*, or for bottomry.

Fourth. On the lives of passengers or individuals of the crew.

Fifth. On all goods of illegal commerce.

886. Should the underwriters be declared bankrupt, pending the risk of the things underwritten, the insured may exact from them security, and it not being given by the bankrupt himself, or by the administrator of his estate, within the term of three days following the requisition made upon him to give it, the contract shall be rescinded.

The underwriter has the same rights upon or against the insured, when the premium of insurance has not been received.

887. Always when, by an examination of the things underwritten, it shall be found that the insured has committed any falsehood knowingly, in regard to any of the clauses of the policy, the insurance shall be held null.

Observing, in respect to the incorrectness of the valuation of the merchandises, what is provided in Article 836 of this Code.

888. The insurance is also null when it is proved that the owner of the things underwritten belongs to a hostile nation, or when the insurance is made upon a vessel habitually occupied in a contraband trade or employment, or when a damage happening is the effect of having committed a contraband offense by the insured.

889. The insurance is null when the vessel fails to make the voyage designated in the policy, or when she fails to depart on the voyage, or when she sails from a different point than that agreed upon, if any of these cases happen by the fault or arbitrary conduct of the insured.

890. The insurance is also null which is made upon a vessel that, after the policy is signed, remains one year or more without the voyage having been begun.

In case of this disposition of the voyage, and of those of the three anterior articles, the underwriter shall have a right to the allowance of one-half per cent of his premiums upon the amount insured.

891. The different contracts of insurance upon a cargo shall be made without fraud. The first contract only shall remain valid, if it covers the whole of the value of the cargo, and then the underwriters of subsequent contracts

of insurance shall remain quit of their obligations, and shall receive one-half per cent of the amount of the premiums of the insurance respectively.

The whole value of the cargo not being covered by the first contract, the responsibility of the excess shall fall upon the underwriters who contracted afterwards, following the order of the dates of each contract.

892. The insured shall not be exonerated from paying the premiums of the different contracts of insurance which may have been made, if he shall not intimate to the subsequent underwriters the invalidity of their contracts before the vessel and cargo have arrived at their port of destination.

893. Every insurance shall be null which is made on a date posterior to the arrival of the things insured at their port of consignment, as well as posterior to the day on which the things may have been lost, always when it may have been legally presumed that the party interested in the event may have had notice of the loss before making the contract.

894. Presumptions take place without prejudice to other proofs, when there have transpired, from the time when the arrival or loss happened up to the date of the contract, as many hours as there are leagues, of legal Spanish measurement, by the shortest route from the place at which the arrival or the loss took place, to the place where the insurance was made or contracted for.

895. A policy of insurance, containing the clause that the same is made upon good or bad information, the presumption of which the anterior article speaks, shall not be admitted, and the insurance shall subsist if it is not fully proved that the insured knew of the loss of the vessel, or the underwriter of her arrival, before signing the contract.

896. An underwriter, who makes an insurance with a knowledge of the safety of the things insured, shall lose the right to the premiums of insurance, and shall be condemned or mulcted in the fifth part of the amount which he has insured.

The fraud being on the part of the insured, the insurance shall not avail him, and besides he shall pay to the underwriter the premiums agreed upon in the contract, and shall be condemned in the fifth part of what he insured. The one party as well as the other shall also be subject to the penalties which may arise, according to the dispositions of the criminal laws concerning frauds.

897. There being many underwriters in one insurance which may have been made with fraud, and there being among them some who contracted it in good faith, they shall receive their premiums entire from the fraudulent underwriters, without the insured having to satisfy them in anything.

898. An agent, who may make an insurance on account of another, with the knowledge that the things insured were lost, shall have the same responsibility as if the insurance had been made on his own account.

899. If the agent should be innocent of the fraud of the owner, the penalties shall fall upon the latter, he always remaining chargeable with paying to the underwriters the premium agreed upon.

CONCERNING THE ABANDONMENT OF THINGS INSURED.

900. The insured can, in the cases expressly pointed out in the law, make an abandonment of the things insured, leaving them for the account of the underwriters, and exacting from them the amounts which they insured upon them.

901. An abandonment may be made in cases—

First. Of capture.

Second. Shipwreck.

Third. Breaking up, or the stranding of the vessel, which may disable her from navigating.

Fourth. Embargo, or detention by order of her own or a foreign government.

Fifth. In case of a total loss of the things insured.

Sixth. A deterioration of the same, which may diminish their value in three-fourths at least of their total value.

All other damages are accounted as averages, and shall be sustained by him to whom it corresponds, according to the terms in which the insurance may have been contracted.

902. The actual abandonment cannot take place, except for losses occurring after the voyage has commenced.

903. The abandonment cannot be partial nor conditional, but must comprehend in it all the effects insured.

904. The abandonment shall not be admissible, unless it is made known to the underwriters within six months after the date on which notice of a loss happening in the ports or on the coasts of Europe is received, and in the same term for those of Asia or Africa, which are in the Mediterranean Sea. This term shall be one year for the losses which may happen in the Azores, Madeira Islands, and on the western coasts of Africa, and the eastern coasts of America; and the term shall be two years for the loss happening in any other part of the world more distant.

905. With respect to cases of capture, the terms fixed in the preceding article shall be extended to the time news is received of the vessel having been taken to any of the ports situated on any of the coasts mentioned therein.

906. The notice shall be taken to have been received for the terms which have been fixed from the time that it may be notorious among the merchants at the place of residence of the insured, or from the time it can be proved, by any legal mode, that the captain, consignee, or any other correspondent, gave him notice of the event.

907. It shall be at the will of the insured to renounce the limit of these terms of time last above mentioned, and to make an abandonment, or exact the amounts insured as soon as the loss of the effects insured can be made to appear.

908. After a year has passed without news being received from the vessel in ordinary voyages, or two years in long voyages, the insured can make an abandonment, and demand of the underwriters the payment for the effects comprehended in the insurance without the necessity of proving their loss. This right must be exercised in the same space of time as fixed in Article 904.

909. All those are reputed as long voyages, for the application of the preceding Article, which are not for any of the ports of Europe, or those of Asia and Africa, in the Mediterranean Sea; or those of America, situated this side of the Rivers La Plata and the St. Lawrence, and the intermediate islands between the coasts of Spain and the countries pointed out in this designation.

910. Nothing shall be an obstacle, when the insurance was made for a time limited, in order that the abandonment may take place when, in the terms of time fixed in Article 908, news concerning the vessel should not have been received, saving to the underwriters the proof which they may make that the loss occurred after their responsibility had expired.

911. At the time the insured makes the abandonment, he ought to declare all the insurances contracted upon the effects abandoned, as well as the loans taken on bottomry upon said effects; and until he has made this declaration, the time shall not begin to run in which he ought to be paid for the value of the effects abandoned.

912. If the insured shall commit fraud in the declaration which the preceding Article prescribes, he shall lose all the rights which belong to him for the insurance without ceasing to be responsible to pay the loans which he may have taken upon the effects insured, notwithstanding their loss.

913. The abandonment being admitted, or declared valid in law, the dominion of the things insured shall be transferred to the underwriter, corresponding to the damages or improvements which may happen to them from the moment at which the abandonment was made.

914. The return of the vessel, after the abandonment being admitted, shall not exonerate the underwriter from the payment of the effects abandoned.

915. There is comprehended in the abandonment of the vessel the freight of the merchandises which may be saved, even when it may have been paid in anticipation, and it shall be considered as belonging to the insurers, under the reserve of the right which belongs to the lenders on bottomry, and also to the crew for their wages, and also to the creditor who may have made advances to fit out the vessel, or for any expenses caused on the last voyage.

916. An abandonment of the things insured cannot be made, except by the owner himself, or by the agent who effected the insurance, or by other persons specially authorized by the owner.

917. In case of capture of the vessel, the insured, or the captain, in his absence, can ransom of themselves the things comprehended in the insurance without the concurrence of the underwriters, or without waiting his instructions when there is not time to demand them, it being their obligation to make known to the underwriters the contract made for the ransom as soon as it can be verified.

918. The underwriters may accept or renounce the agreement made by the captain or insured for the ransom, intimating to the latter their resolution in twenty-four hours after notification of the agreement; but, accepting of the agreement, they shall deliver in the act the amount agreed upon for the ransom, and the subsequent risks of the voyage shall continue on their account, according to the stipulations of the policy of insurance; but, disapproving of the agreement, they shall make payment of the amount insured, and shall not retain or reserve any right over the things ransomed. If the underwriters shall not make known their resolution in the time fixed, it shall be understood that they have renounced the agreement.

919. When, on account of the vessel being recaptured, the insured shall be restored to the ownership of his effects, all the damages and expenses caused by their loss shall be held for average, and the underwriter shall be accountable, to satisfy them the damages and expenses.

920. If, in consequence of the recapture, the possession of the effects insured shall pass to the hands of a third person, the insured can use the right of abandonment.

921. In cases of shipwreck or capture, the insured is bound to use every diligence which circumstances may permit to save or recover the effects lost; without prejudice to the abandonment, which he may make at its proper time. The legitimate expenses caused in the recovery shall be chargeable

upon the underwriters to the amount of the value of the effects which may be saved, which shall be made effective by legal proceedings in default of payment.

922. An abandonment shall not be allowed on account of unseaworthiness of the vessel always when the damage incurred may be such that she may be refitted for the voyage.

923. The refitting being verified, the underwriters shall only be answerable for the vessels stranding on shore, or for any other damage which the vessel may have received therefrom.

924. The vessel being absolutely incapacitated from navigating, those interested in the cargo who may be present, or, in their absence, the captain, shall use every diligence possible to conduct the cargo to the port of its destination.

925. It shall be for the account of the underwriters to run or incur the risks of transshipment, and those of the new voyage, until the goods or effects are delivered in the place designated in the policy of insurance.

926. The underwriters are also responsible for averages, expenses of discharge, of stowage, of re-embarkations, of excess of freight, and all the other expenses caused for the transshipping of the cargo.

927. If a vessel should not be found to transport the effects insured to their destination, the owner may make an abandonment.

928. The underwriters are bound to complete the transshipment and the conduction of the effects within the term of six months, if the incapacity of the vessel occurred in the seas which surround Europe, from the Straits of Gibraltar to the Bosphorus. And within a year if it is verified in a place more distant, counting the term from the day in which the event may have been communicated from the insured.

929. In case of the voyage of the vessel being interrupted by an embargo or a forced detention, the insured shall make it known to the underwriters as soon as he has notice of it, and he cannot make an abandonment until the same period prescribed in the foregoing article has transpired. The insured are bound to afford the underwriters the aid which may be in their power to effect the raising of the embargo, and of themselves to make exertions to that end, in case that the underwriters, being in a remote country, cannot immediately act in conjunction with them.

A. K.

MERCANTILE LAW CASES.

DENIO'S SUPREME COURT REPORTS.

WE published, in the last number of the *Merchants' Magazine*, several important Mercantile Cases, compiled from the volumes which form Denio's series of Reports of the Decisions of the Supreme Court of the State of New York, as it existed prior to the organization of the Judiciary in the State of New York under the new Constitution. We add a few more, of equal interest and importance to commercial men.

AGENCY. We will next refer our readers to the case of *Stone* and others vs. *Hayes*, found at page 575 of the third volume. This action was brought upon a claim for money had and received, in the Superior Court in the city of New York, where judgment was rendered for the defendants, which was reversed in the Supreme Court, whereupon the defendants brought a writ of error to the Court of Errors, and here the judgment of the Supreme Court was affirmed by a vote of 18 to 3.

The case was this. A mercantile firm in the city of New York, in 1835, held a quantity of goods on consignment which belonged to one Hayes, who resided in the north of Ireland. These goods were destroyed by the great fire in 1835, and the firm recovered from the underwriters, on the goods of Hayes, about \$3000 beyond the amount of their expenses and commissions. Hayes being advised of this recovery, directed the mercantile firm to remit this amount to him in a bill of exchange. They purchased a bill on a house in Liverpool and remitted it to Hayes, in Europe; but before the bill matured the drawee, who was solvent at the time of the making of the bill, failed. It appeared that the firm had bought the bill in market, or of the drawer, upon their own credit, and not with the cash funds of Hayes, which they held in their hands. The bill was remitted to Hayes according to his order, and the agents and debtors appear to have conducted the transaction according to mercantile usage in all respects except the purchase of the bill on credit. When Hayes found out that the bill was purchased without the application of his funds, he repudiated the transaction altogether, and gave the firm notice that he should hold them responsible for the loss. The defendants refused to make good the loss, and on the trial contended—

1st. That the bill of exchange, when remitted, was a valid payment of the debt which the defendant owed the plaintiff.

2d. That the loss was occasioned by the failure of the drawee, which they could not have anticipated.

The Court, in giving judgment in this cause against the defendants, held—

1st. That an agent could not act so as to bind his principal when he has an adverse interest to him.

2d. That when an agent has a sum of money in his hands belonging to his principal, and is authorized to remit the money by purchasing a bill of exchange, he should purchase the bill with such money, and not by using his own credit in whole or in part.

3d. That when the agent does purchase the bill according to instructions, but uses his credit instead of the fund of the principal, the agent will be liable to respond to the principal in an action for money had and received, and the judgment therefore in this case in the court below ought to have been rendered against the defendants.

ASSESSMENT SALES OF REAL ESTATE. We will now call the attention of the reader to the case of *Doughty vs. Hope*, found at page 595 of the third volume of these reports. This case was one of a class of cases which have excited justly a great interest in the public mind, being a street case, or rather a case wherein a purchaser upon a sale of real estate in the city of New York for non-payment of taxes and assessments, sought, by an action of ejectment, to obtain possession from the original owner of the land purchased at the sale.

It appeared that the Common Council of the city of New York, by ordinance, had directed a street to be regulated by setting curb and gutter stones under a statute of this State, and had appointed three commissioners or assessors to make an estimate of the expense of the proceeding, and to assess the expenses among the owners and occupants of the houses and lots intended to be benefited by the improvements. This having been done, the owners refused to pay the assessments, and the real estate was set up at auction and sold to the highest bidder by the corporation to raise money to pay the expenses of the improvements. Two of the assessors only signed the assessment, and the third did not join in the report of the estimate and assessment. The Court of Appeals, to which this cause had traveled, held—

1st. That an estimate and assessment made by two of three assessors, appointed for this purpose, is not a valid proceeding.

2d. That when property is taken under a statute without the consent of the owner on a sale for non-payment of taxes and assessments, or for making a highway, or for any public or private purpose, the power given by the statute must be in all things strictly pursued; and if any material omission is made in any of the proceedings, the whole will be void.

3d. That any one of the assessors is a competent witness to prove that another assessor did not act in the proceeding.

4th. That a lease being executed to a purchaser is nothing more than a muniment of title, as against the public authority that makes the sale, and does not affect the original owner; and that a purchaser is bound to show on his part that all the proceedings have been regular from the beginning to the end, and within the jurisdiction of the tribunal which acts in the premises, before he will be entitled to recover in his action of ejectment.

5th. That a ratification by the public authority who directs the assessment does not render valid an assessment which has not conformed to the directions of the statute.

LIABILITY FOR FREIGHT OF ENDORSERS OF BILLS OF LADING. We will next call the attention of our readers to the case of *Funck and others vs. Meriam and others*, found at page 110 of the fourth volume. This was an action brought against the defendants for the freight of nineteen packages of goods, shipped at Havre for New York in 1839-40, and consigned to the defendants or to their order on paying freight and 10 per cent primage. The bills of lading came to the hands of the defendants, who were merchants in the city of New York, and were endorsed by the defendants, with a direction to deliver the goods to another firm by the name of Mainon and Bonnay. The endorsees of the bill of lading received the goods, but did not pay the freight at the time of the delivery, and in the course of four months afterwards failed, without having paid the freight due for the carriage of the goods, having, at the time of the failure, executed a general assignment for the benefit of their creditors, to the defendants, to whom they owed a considerable amount. The goods for which this freight was claimed, or a considerable part of them, passed under the assignment. It appeared, however, on the trial, that the defendants originally had no interest in the goods consigned, but that they were forwarded through the defendants' house to Mainon and Bonnay, in order that the latter house might settle for the purchase piece of the goods with the defendants, according to a practice or arrangement in respect to importations; that the defendants were agents of the shippers of the goods, and the goods were to be transferred to Mainon and Bonnay, and the bill of lading was sent to the defendants along with the goods, to be transferred on their receiving payment of the purchase piece of the goods; but it did not appear that the carriers of the goods, who were the plaintiffs in this cause, had ever known of this arrangement.

Verdict was rendered for the plaintiffs in the court below, and judgment being given thereon, and a bill of exceptions having been signed, the defendants brought error to the Supreme Court.

Mr. Justice Jewett gave the opinion of the Supreme Court, reversing the judgment of the court below. He came to the following conclusions:—

1st. That when goods, by the terms of a bill of lading, are to be delivered to a consignee or his order on payment of freight, the party receiving the goods, whether the consignee or endorsee, to whom the bill of lading has been transferred, makes himself responsible for the payment of the freight.

2d. That the person who actually accepts the bill of lading, and receives the property, thereby makes himself a party to the contract, and he alone is liable to pay the freight.

3d. That the consignees not having received the goods, but only the bill of lading, and then endorsed the bill of lading, and the endorsees, under the bill of lading, having actually received the goods in this case from the carrier, the defendants, the consignees in the bill of lading, were not bound to pay freight.

4th. That the master of the vessel was not bound to part with the goods until the freight was paid; but, by delivering the goods before payment of the freight, he waived or discharged his legal right to demand payment of the consignees unless they actually received the goods.

5th. That the party who actually receives the goods under the bill of lading, whether the consignee named therein or an endorser thereof, becomes a party to the contract respecting the payment of freight, and he alone is liable to an action for the freight.

6th. It appears from this case that a consignee named in the bill of lading, un-

less he has ordered the shipment of the goods or is the owner of them, is not bound in any case to receive the goods when they arrive, but may refuse to acknowledge the transaction and refuse payment of the freight.

The view here taken of the rights and liabilities of the parties to bills of lading in some respects differs from that of the Superior Court in the city of New York, in which the cause was originally tried, and which, as a commercial tribunal, certainly ranks among the ablest in the land. Its decision must be considered as reversed in this instance, as the Supreme Court was, until the past year, the Appellate Court, in which the decisions of the Superior Court were reviewed. We will observe that when the learned Doctors of the Law disagree, how shall we, the people, find out what is the disease or the remedy.

CONSTITUTIONALITY OF THE PASSENGER LAW OF NEW YORK. We will next refer our readers to a case in the fourth volume of these reports, found at page 471—that of *The People vs. Brooks*.

This case was originally tried by jury before Judge William Kent, of the New York Circuit, and verdict was rendered for plaintiff in the court below.

A bill of exceptions being signed by the circuit judge, the cause came on for argument in May term, 1847, before the Supreme Court, and the verdict was here set aside, and a new trial granted. The case involved the question whether the master and seamen of vessels engaged in the foreign and coasting trade are bound, by the laws of the State of New York, to contribute and pay a sum of money for hospital purposes to the State of New York, pursuant to the requirements of the New York statute.

Mr. Justice Beardsley delivered the opinion of the Court, and held—

1st. That the statutes of the State of New York, requiring the payment of a sum of money for hospital purposes from masters of vessels engaged in the foreign and coasting trade for each of the officers and crew of such vessel, are in conflict with the provision of the Constitution of the United States investing Congress with the power to regulate commerce, and of the laws of the United States passed in the exercise of that power, and are therefore void.

2d. That the statutes of the State of New York requiring payments from shipmasters on the account of passengers are constitutional and valid.

We believe that this second head of the decision has lately been overruled by the decision of the Supreme Court of the United States, in the case of *Turner vs. The State of New York*, and also by the case of *Price vs. The State of Massachusetts*. The taxing of passengers, seamen, masters, and officers of ships and vessels engaged in the coasting trade and on foreign voyages, has always appeared to us to be a regulation of commerce among the States and with foreign countries, and to come directly in conflict with the provisions of the Constitution of the United States on this subject.

There are many more commercial cases of great public interest to be found in the four volumes of reports before us, but we are admonished that our article has been extended to an unusual length; and we close with asking the indulgence of our readers, and their favorable estimation of the difficulties under which we labor even to give a condensed view of these important cases.

THE EXTENT OF THE LIABILITY OF A FACTOR WHO DISOBEYS THE ORDERS OF HIS PRINCIPAL.*

Supreme Court of Missouri. October Term, 1847. *Switzer et al. vs. Connett*. Appeal from St. Louis Common Pleas. In May, 1844, Connett put into the hands of the Switzer's, commission merchants of St. Louis, a quantity of bale rope and packing yarn, to be sold at the limit, 6½ cents per pound. It was sold for less,

* We are indebted to CHARLES C. WHITTLESSEY, Esq., of the St. Louis (Missouri) Bar, for the following case. Mr. W., in a note to the editor of this Magazine, expresses the opinion, that the reasons given for this decision are better than those in the case mentioned in the March number of this Magazine; "for undoubtedly," he says, "a man should have the control of his own principal."—*Ed. Merchants' Magazine*.

but at the best market price at the time, and at as high a price as could have been obtained at any time between the day of sale and the time of trial. This suit was brought to recover the difference between the limited and sale prices. The court below gave judgment for the plaintiff.

Appellant's counsel cited 14 Peters, 479, 496. Story on Agency, p. 258, secs. 217, 218; p. 263, secs. 220, 221, 222; Kinne's S. C. Ap. 1847, p. 104; 7 Ala. R. 335; 1 Broch. R. 103. Appellee's counsel, 4 Mason, 296; *Smart vs. Sand*, decided July, 1846. Com. Pleas in England, reported Law Journal, vol. i., No. 3, new series; 1 Swift's Dig. 332.

McBRIDE, Justice, delivered the opinion of the court. Switzer, as the agent or factor of Connett, was bound to execute the orders of his principal, whenever, for a valuable consideration, he undertook to perform them; unless he was prevented by some unavoidable calamity, or overwhelming force or accident, without any default on his part, and unless the instructions required him to do some illegal or immoral act, in which case he might violate them with impunity. This duty may arise in various ways, either by express agreement, or by clear implication. The latter arises generally from the common usage of the particular agency, or from the general mode of dealing between the parties, or from the mutual implications arising from the nature and objects of a single transaction.

Whenever an agent violates his duties or obligations to his principal, whether it be by exceeding his authority, or by positive misconduct, or by mere negligence or omission in the proper functions of his agency, or in any other manner, and any loss or damage thereby falls on his principal, he is responsible therefor, and bound to make a full indemnity. And it will constitute no defense for him, that he intended the act to be a benefit to the principal. The question is not whether he has acted from good motives and without fraud; but whether he has done his duty, and acted according to the confidence reposed in him.

The defendant, in support of the position assumed by him, refers to Story on Agency, sec. 221, where it is laid down, that "if the goods of the principal are negligently lost, or tortiously disposed of by the agent, he is made liable for the actual value of the goods at the time of the loss or conversion." To support the principle, reference is made to 3 Wheat. 560; 1 Mason R. 117; 11 Ohio R. 363. After examining the cases, the Judge says: It will be seen, by reference to the cases cited, that they do not sustain the rule laid down by the author, at least to the unqualified extent stated by him.

Suppose I lend my horse to A., and before he departs he says to me, If I can sell your horse shall I do so? I reply, Yes, you may sell, provided you can obtain \$75 for him. He sells the horse for \$60, and offers to pay the amount; may I not decline receiving, and hold him responsible for \$75, the price I placed upon the horse, notwithstanding the \$60 obtained may be the full value? If it be my right or privilege to place a value upon my own property, I certainly can do so, even should the price exceed the market value.

There is no pretense that advances had been made on the goods deposited with the defendant, and that he sold them after having given the plaintiff notice to repay the advances, and a failure to do so, or a sale without such notice, for the purpose of meeting acceptances then due, for advances on the consignment; but it is a naked case of disobedience of orders, whereby the factor, not only without the consent, but against the express instructions of his principal, divests him of his property.

If the principal has the right to affix a value to his property, and that he has cannot be questioned, and the factor is properly advised thereof, all discretion as to price is withheld from the factor; and if he disposes of the property for a less sum than that limited, he should be regarded and treated as a purchaser himself at the fixed price.

Can the rule be a just one, which makes no distinction between the liability of an agent who acts according to the instructions of his principal, and one who acts in utter violation of instructions? Yet such is the fact, if the rule laid down in Story on Agency, sec. 221, be correct; because in either case the principal could only recover the market value of the goods sold. In the one case, the parties have

contracted expressly, that the goods shall be sold at a certain price; in the other, the parties not having contracted as to price expressly, the law makes a contract by implication, and fixes the price at that which the goods would bring in the market at the date of the sale. The principal and agent having a legal right to contract as to price, and having contracted, the law has no office to perform except to enforce the contract as made between the parties. Any other doctrine would render all instructions by the principal nugatory and futile; and so soon as his goods reached the hands of an agent, his authority to control the disposition of them would be at an end; and the agent might sell at any price, being liable only for the market price.

Judgment affirmed.

AUCTION SALES—DEFAULTING PURCHASERS.

In the Supreme Court of Louisiana. J. A. Guillott, C. Brown subrogated, vs. Jas. R. Jennings. Appeal from the Fifth District Court of New Orleans.

To recover the damages from a defaulting purchaser at a sale at auction, under the 2589th art. C. C., the terms of the second sale, made at the risk of the first purchaser, or the *folle enchere*, must conform with the terms first offered, or there can be no standard erected for damages, and no action will lie.

This action against the defendant was brought to recover damages resulting from a sale at his risk (*folle enchere*) of certain property previously sold to him at auction in 1843.

SLIDELL, Justice.—The remedy through the medium of the *folle enchere* has been properly characterized as “summary and service,” and from this consideration the conclusion is fairly derived that it ought to be confined to cases clearly coming within the provisions of the law, and in which its requisitions have been observed. See *Second Municipality vs. Hennen*, 14 La. R. 586.

The art. 2589, C. C., seems to us to contemplate that the terms of the *folle enchere* should be the same as those of the first adjudication. In the present case they were not the same. At the first sale to the defendant, the terms were that the purchaser should assume the payment of a note of \$640, due in June, 1844, and the balance cash. At the *folle enchere* the terms were cash.

The law gives the remedies against the defaulting purchaser; the action for specific performance, the ordinary action for damages, and the action based upon the *folle enchere*, which itself liquidates the damages if properly conducted. If the seller chooses the latter remedy he must take it as it is given or not at all. When both sales are made upon the same terms, the difference is not an inequitable standard of the injury sustained by the defendant's failure to fulfill the contract. But when the terms are changed a new element is introduced to affect the result. For daily experience teaches us that in consequence of the deficiency of capital, and the reliance of the majority of buyers in some degree upon the efforts of their future industry, sales of real estate are made more advantageously in point of price upon credit than for cash. Here the property was sold upon a partial credit in May, 1843, for \$1,375, and for cash in August, 1844, for \$660.

We cannot say that this discrepancy was not in some degree owing to the difference of the terms of sale; and the inflexible standard of the *folle enchere*, by which we are called upon to measure the defendant's liability, is consequently in this case unsafe and untrue. Had the remedy been pursued according to the requisitions of the law, judicial discretion would have been exclusive legal presumption. As it was not, the legal standard has not been created, and there is no basis for the present suit. Judgment reversed and rendered as in nonsuit, the plaintiff paying costs.

COMMERCIAL CHRONICLE AND REVIEW.

AMELIORATION IN THE MONEY MARKET SINCE OUR LAST—RATES OF EXCHANGE IN NEW YORK—SHIPMENT OF GOLD FROM SAN FRANCISCO—EMIGRATION TO CALIFORNIA—EXPORTS OF DOMESTIC PRODUCE FROM THE UNITED STATES FOR LAST SIX YEARS—IMPORTATION OF BREADSTUFFS INTO GREAT BRITAIN AND IRELAND—AVERAGE PRICES OF GRAIN IN GREAT BRITAIN—EXPORTS OF FLOUR, ETC., FROM PORTS OF UNITED STATES TO GREAT BRITAIN AND IRELAND FROM SEPTEMBER, 1848, ETC.—MERCHANTS' EXCHANGE BANK—INCREASE OF STOCK COMPANIES, ETC.—PRICES OF UNITED STATES AND OTHER STOCKS—UNITED STATES TREASURY NOTES OUTSTANDING—REVENUE AND EXPENDITURES OF THE UNITED STATES—GOVERNMENT FUNDS IN THE TREASURY—PAYMENT OF THE MEXICAN DEBT, ETC., ETC.

SINCE the date of our last, the causes which we then indicated as in operation to produce an amelioration of the tightness of the money market, have produced that effect. The low rate of exchanges which had then prevailed here, were operating to produce an importation of specie, and this has now reached \$2,500,000 in amount, acting very perceptibly upon the exchanges, as indicated in the following table:—

RATES OF EXCHANGE IN NEW YORK.

	Sterling.	Paris, 60 days.	Amsterdam.	Hamburg.	Bremen.
December 1	8½ a 8½	5.27½ a 5.25	40½ a 40½	35½ a 35½	78½ a 78½
" 15	8½ a 9	5.30 a 5.25	40½ a 40½	35½ a 35½	78½ a ..
January 1	8½ a 9	5.27½ a	40½ a 40½	35½ a 35½	78½ a 78½
" 15	8½ a 9	5.30 a 5.25	40½ a 40½	35½ a 35½	78½ a 78½
February 1	8½ a 8½	5.32½ a 5.25	40½ a 40½	35½ a 35½	.. a 78½
" 15	8 a 8½	5.31½ a 5.27½	40½ a 40½	35 a 35½	78½ a 78½
March 1	7 a 8	5.32½ a 5.30	40 a 40½	34½ a 35	77½ a 78½
" 15	6½ a 7	5.37½ a 5.32	39½ a 39½	34½ a 34½	77½ a 78
April 1	5 a 6½	5.37½ a 5.32	38½ a 39½	34½ a 34½	76½ a 77½
" 15	4½ a 6½	5.37½ a 5.35	39 a 39½	34½ a 34½	76½ a 77
May 1	7½ a 8	5.30 a 5.32	39½ a 39½	34½ a 34½	77½ a 78.
" 14	8 a 8½	5.26 a 5.25	40 a 40½	35 a 35½	78½ a 79

The amount of gold which has reached the United States from California is, up to this moment, unimportant; and the great expectations suggested by the excited imaginations of sanguine adventurers, have not yet been fulfilled. Yet are the gold products of that region of the most surprising nature. A collation of the amounts reported as arrived at various points, mostly London, show the aggregate shipments from San Francisco to have been about \$3,000,000, and this sum would doubtless be swollen to \$4,000,000, up to the close of the 12 months within which the discovery was made. When we reflect that this important amount, equal to more than the whole rice crop of the Atlantic States, and one-half the whole tobacco exports of the Union, was the product of a few inexperienced and poorly provided persons, without means of shelter or necessaries of life, in the gold region, we become struck with the richness of mines that yield such results, and are disposed to place a high figure as the sum of the productions of the numbers who have gone thither provided with every possible facility for successful operations. The passengers and crews of vessels cleared from the United States for that destination, by enumeration, number over 20,000. Of these, perhaps one-half are in a condition to operate with the best effect. While they are pursuing their enterprise, the means of communication between the Sacramento and the Atlantic States are becoming better defined, safer, and more reliable, and the connections between the miners and the older States more closely drawn. Hence

a much larger proportion of the rich product will reach the Atlantic cities than last year, when the first effect of the export of gold from San Francisco, producing a sudden demand for supplies, was to empty the stores along the whole coast, to the extreme of the southern continent, and the ownership of those goods naturally indicated London as the point of destination for the gold received in payment. Under these circumstances, the supply of the precious metals is likely at least to reach in amount the demand; more particularly, that a considerable portion of the coin which last year sought Europe in exchange for the cheap goods of France or other countries, is now returning, as well for farm produce as larger quantities of cotton at better prices. The exports of both these articles exceed in amount the quantities exported last year. It is to be regretted, that the publication of the official returns of the United States commerce is annually so long delayed as to be of little service in estimating current business. The returns for the year ending June 30, 1848, have but now come to hand, yet we have had the British returns for the year ending December 31; that is, six months later, notwithstanding that the number of shipments and quantities of articles are there greater and more complicated. It would certainly seem that a little more energy in relation to business details, and less indulgence to the convenience of printers, would place valuable information before the public in season to secure their interests. As it is, we bring down a table of quantities exported for the fiscal year 1848, as follows:—

EXPORTS OF DOMESTIC PRODUCE FROM THE UNITED STATES IN SIX YEARS.

	1842.	1843.	1844.	1846.	1847.	1848.
Fish, dried..... quintals	256,083	174,290	271,610	277,401	258,870	206,549
Oil, sperm..... gallons	287,761	476,688	451,317	772,019	795,792	206,421
“ whale.....	3,909,728	2,479,916	4,104,504	2,652,874	3,189,598	1,607,038
Whalebone..... lbs.	918,289	896,773	4,149,607	1,697,892	2,031,137	1,054,379
Candles, sperm.....	966,010	963,073	606,454	1,083,839	795,150	598,458
“ tallow.....	1,981,602	1,996,357	3,066,566	3,718,714	3,094,985	3,468,592
Slaves..... M.	31,843	19,765	23,946	28,900	21,906	22,483
Tar and pitch..... bbls.	52,455	37,454	62,477	65,905	47,974	60,240
Turpentine and rosin.....	277,787	188,952	892,688	351,914	312,050	394,738
Ashes..... tons	8,012	5,436	18,271	9,900	7,935	4,465
Beef..... bbls.	48,581	37,812	106,474	149,328	111,172	103,719
Tallow..... lbs.	7,038,092	7,489,362	9,913,366	10,435,666	11,172,975	8,004,325
Pork..... bbls.	180,032	80,310	161,629	190,422	206,190	248,999
Hams..... lbs.	2,518,841	2,492,067	3,886,976	3,006,630	17,921,471	33,551,024
Lard.....	90,102,397	94,534,217	25,746,355	21,643,164	37,611,161	49,685,539
Butter.....	2,055,133	3,408,247	3,251,959	3,439,660	4,214,483	2,751,086
Cheese.....	2,456,607	3,440,144	7,343,145	8,675,390	15,637,600	12,912,305
Sheep..... No.	19,557	13,609	19,980	9,254	10,533	6,231
Wheat..... bush.	817,598	311,685	558,917	1,913,795	4,399,951	2,094,794
Flour..... bbls.	1,283,602	841,474	1,438,575	1,613,795	4,399,951	2,118,383
Corn..... bush.	600,308	672,608	825,282	1,798,068	16,398,056	5,917,634
Corn meal..... bbls.	909,199	174,354	247,882	598,790	948,060	592,320
Bread, ship.....	83,584	96,572	117,781	114,792	180,985	167,780
Potatoes..... bush.	194,946	144,991	182,222	195,150	164,300	132,170
Apples..... bbls.	14,229	15,412	22,384	30,903	45,000	38,719
Rice.....	114,617	106,768	134,745	198,007	144,427	100,423
Cotton..... lbs.	584,717,017	792,297,106	663,633,455	547,558,055	527,219,958	807,274,421
Tobacco..... hhds.	158,710	94,454	103,049	147,998	135,769	120,666
Hops..... lbs.	399,188	1,182,565	664,633	267,754	1,297,453	257,016
Wax.....	331,856	475,797	963,061	542,520	697,013	599,691
Spirits..... gallons	193,860	89,546	215,719	257,496	209,507	942,579
Molasses.....	998,409	491,947	881,325	850,462	869,738	895,701
Soap..... lbs.	3,854,836	3,186,632	4,739,751	3,161,910	3,802,783	3,644,921
Tobacco, manufactured.....	3,434,914	3,404,252	6,066,878	6,854,856	7,894,508	6,698,587
Lead.....	14,552,357	15,266,918	18,420,407	18,993,766	3,396,028	1,994,704
Nails.....	2,156,923	2,629,901	2,945,634	2,438,336	3,197,135	3,157,219
Sugar, refined.....	4,490,346	598,684	1,671,107	4,198,512	1,530,415	3,376,773
Gunpowder.....	1,539,284	436,589	1,927,654	1,436,205	786,000	1,164,726
Salt..... bush.	110,400	40,878	157,589	117,687	202,244	219,145
Brown Sugar..... lbs.	.....	.....	.....	109,395	368,057	125,006
Coal..... tons	.....	.....	.....	.....	.....	8,309
Wool.....	.....	.....	.....	.....	.....	761,108

It is to be observed, that from the year 1841 to 1844, which was a year of good crops abroad, the export of provisions was rapidly on the increase, under modified restriction upon the importations in foreign countries. Each of these articles increased in 1846, and the failing crop of that year swelled the aggregates beyond all precedent in 1847. In 1848, a reaction from the large business of 1847 is apparent. This, however, is again on the increase, and the quantity of provisions and breadstuffs sent forward this year is, from official sources, known to be much larger than in any year previous to 1847.

The fact that England requires now annual supplies as large as formerly, resulting only from very deficient harvests, is established, and the ability of the United States to furnish them in competition with the countries of Europe, is also evident from the results of the present year's business. The revolutions in Europe have produced an unusual desire to sell produce, and as a consequence, the quantities that have sought the English market are much larger than would have been the case in a regular and undisturbed state of commerce. This circumstance, in connection with good English harvests, has swollen the British imports to a high figure, and caused a low level of prices to rule. Parliamentary tables give the following as the quantities of breadstuffs that have been imported into Great Britain for a series of years:—

IMPORTATION OF BREADSTUFFS INTO GREAT BRITAIN AND IRELAND.

	1843.	1844.	1845.	1846.	1847.	1848.
	<i>Qrs.</i>	<i>Qrs.</i>	<i>Qrs.</i>	<i>Qrs.</i>	<i>Qrs.</i>	<i>Qrs.</i>
Wheat.....	940,120	1,099,077	871,443	1,437,944	2,656,454	2,594,013
Barley.....	179,280	1,019,345	371,130	373,046	772,683	1,063,912
Oats.....	84,323	299,601	592,620	796,632	1,705,708	977,761
Rye.....	4,872	26,532	435	1,775	68,817	62,891
Pesa.....	48,803	108,001	84,830	214,662	157,618	217,763
Beans.....	47,984	154,424	185,034	255,896	443,675	490,353
Maize or Indian corn..	517	37,064	55,378	711,861	3,608,312	1,586,771
Buckwheat.....	2	3,907	1,773	22,850	22,917	205
Bigg.....	.....	.....	.....	.....	491	906
Malt.....	.....	.....	1	.....	.....	1
Total.....	1,305,506	2,747,951	2,162,644	3,814,666	9,436,675	6,994,576
	<i>Cwt.</i>	<i>Cwt.</i>	<i>Cwt.</i>	<i>Cwt.</i>	<i>Cwt.</i>	<i>Cwt.</i>
Wheat flour.....	436,878	980,845	950,195	3,198,876	6,329,058	1,765,475
Oatmeal & barley meal	5,584	3,951	3,063	25,671	69,673	6,771
Indian meal.....	1	105	.....	131,910	1,448,837	234,114
Rye & buckwheat meal	.....	.....	.....	355	786,123	36,336
Total.....	442,463	984,701	953,258	3,356,812	8,633,991	2,042,696

It will be seen that the quantities are vastly in excess of any year, with the exception of that of famine. As a consequence, prices have ruled very low, as indicated in the following official figures:—

IMPERIAL AVERAGE PRICES OF GRAIN.													
Weekly averages.		Wheat.		Barley.		Oats.		Rye.		Beans.		Pesa.	
		<i>s.</i>	<i>d.</i>	<i>s.</i>	<i>d.</i>	<i>s.</i>	<i>d.</i>	<i>s.</i>	<i>d.</i>	<i>s.</i>	<i>d.</i>	<i>s.</i>	<i>d.</i>
March	17.....	45	4	29	2	17	0	23	9	30	11	30	8
"	24.....	44	9	28	10	17	1	26	4	28	9	31	6
"	31.....	44	1	28	11	16	4	24	6	28	1	32	2
April	7.....	44	5	28	9	16	9	26	5	28	1	29	0
"	14.....	44	3	28	6	17	0	23	1	28	5	30	11
"	21.....	44	5	28	8	16	8	22	4	28	11	28	0
Aggregate of 6 weeks		44	6	28	9	16	10	24	5	28	10	30	7

This low range of rates, being nearly 90s. per quarter for wheat lower than in the same period of 1847, has doubtless greatly promoted the consumption of food. In the face of these circumstances the United States exports have considerably increased thus far in 1848, as indicated in the following table, which shows the quantities sent from the United States to Great Britain and Ireland for eight months of the fiscal year 1849:—

EXPORT OF BREADSTUFFS TO GREAT BRITAIN AND IRELAND FROM SEPTEMBER 1, 1848.

	To	Fleur. Bbls.	Corn meal. Bbls.	Wheat. Bush.	Corn. Bush.
From New York....	May 8...	524,109	80,857	545,558	8,866,704
New Orleans...	" 4...	138,375	3,553	111,453	2,272,912
Philadelphia...	" 1...	68,335	22,310	210,810	921,984
Baltimore....	" 2...	90,028	7,366	164,622	780,085
Boston.....	" 8...	11,922	2,146	12,887	377,430
Other ports...	" 1...	8,195	5,103	81,606	624,677
Total.....		840,964	70,835	1,076,906	8,853,792
" 1848.		155,666	89,157	215,139	2,452,921
" 1847.		1,685,734	455,666	1,570,614	11,245,776

The increase in quantities is very considerable; and notwithstanding the large supplies apparent in the imports into England, the blockade of the Baltic ports, by stopping further receipts from that quarter, imparted a further stimulus to the disposition to ship, supported by the rise in exchanges, expressed in the above table, and which was equal to 3½ cents per bushel on wheat in favor of the shipper.

The importation of goods continued large down to the close of the spring business. This was probably, to some extent, promoted by the impression that the demand for goods would be considerable for the California market. The effect of that influence has, however, been rather to depress business than to promote its general activity, and prices have tended to a depreciation. It is the case, that as goods have fallen in value, there has been more disposition to sell on easier terms of credit than if the reverse had been the case, and values were maintained. The country does not pay up so well as it was hoped would be the case, but the supplies of produce received per canals since their opening on the 1st instant are large, and will facilitate the settlement of accounts. The approach of summer, with a decrease in the quantities of the great staples held, lessens the demand for money; and while the banks discount all the good paper offering, they are particular in relation to its character. The paper that in point of time comes not within their limits, is done out of doors at an average of nine per cent per annum. The profits of the banks, as we indicated in our last number, have been good, and the disposition to invest in bank capital is evidently gaining ground. As an instance, we referred to the fact, in our last number, that the charter of the Merchants' Exchange Bank, of the city of New York, with a capital of \$750,000, expired June 1st, and that the institution is organizing under the new law. It proposed a capital of \$1,000,000. It appears now that the whole of the old stock, within a few hundred dollars, has been subscribed to the new, and as much additional as makes the new capital \$1,220,350. This is a remarkable instance of confidence, both in the operation of the free law and the management of this bank, as well as in the general value of bank stock as an investment. Indeed, in all parts of the country, the disposition to invest capital in companies is very great; as an instance, at the late session of the Massachusetts Legislature there were passed acts to incorpo-

rate ten new banks, and to increase the capitals of thirteen old ones—concerning thirty-nine railroads, to incorporate thirty-nine manufacturing and other companies, and ten insurance companies—making 109 companies that require more capital. In Pennsylvania the work of incorporation is equally rapid, and these operations probably absorb capital somewhat faster than it accumulates; and, united with the capital sent to California, naturally raises the rate of interest, and absorbs the means even of small accumulators. The demand for capital for the organization of companies is always a source of pressure proportioned to the amount required, and this demand has probably influenced in a considerable degree the values of old stocks upon the New York market. The following table indicates the value of the leading stocks in the New York market at different periods:—

PRICES OF STOCKS.

	Jan., 1847.	Jan., 1848.	April, 1848.	May 16, 1848.
United States 5's, 1853.....	91½	91	98 a 98½	99½ a 100
“ 6's, 1862.....	100½	98½	107½ a 107½	109 a 109½
“ Treasury Notes ..	99½	99½	108½ a 108½	110 a 110½
New York 6's, 1860.....	103	100½	108½ a 108½	108 a 108½
Ohio 6's, 1860.....	91½	95½	104 a 104½	106½ a 106½
Kentucky 6's, 1871.....	101	99	101½ a 102	103 a 103½
Tennessee 6's, 1870.....	98	98	101 a 102	102 a 102½
Pennsylvania 5's, 1869.....	69½	71	80 a 80½	82½ a 83
Indiana 5's.....	33	50	64 a 65	64½ a 65

This is an average rise of 10 per cent in all these stocks since January, 1847, and the market is now in a state of depression. The result shows the progressive value of stock securities, and this returning confidence is participated in in Europe; and the stock of the United States, as well as of some of the State governments, is in active demand in London. The amount issued at Washington from April 21 to May 11, on foreign account, was \$319,800. Probably a considerable portion of this was for funded Treasury notes. It will be remembered that the law of January, 1847, permitted the funding of all outstanding Treasury notes in a twenty year stock; and, as a consequence, when that stock, which may be transferable by signature, or bearing coupons, by delivery rose under the English demand, this privilege was availed of rapidly, as indicated in the official returns of notes outstanding:—

UNITED STATES TREASURY NOTES OUTSTANDING.

	Issues prior to act of July, 1846.	Act of July, 1846.	Act of January, 1847.	Total outstanding.
October 1, 1848.....	\$161,989 31	\$290,850	\$11,326,550	\$11,779,389 31
May 1, 1849.....	150,339 31	136,850	5,673,550	5,959,739 31
Decrease funded.....	\$11,650 00	\$155,000	\$5,653,000	\$5,819,641 00

The permission to fund the notes which are issued, payable in a year, was given at a time when the continuance of the war and the wants of the government were alike uncertain. As it has turned out, the bargain was a bad one for the government. Its means are now accumulating, and it has no power to pay off, but can only operate upon its debt by buying at the market rates. The funding of the \$11,000,000 of notes that were outstanding last fall, will involve eighteen years' interest at 6 per cent, amounting to some \$10,000,000, while an excess of revenue is accumulating idly in the Treasury vaults. It would be far better for the government to appropriate all surplus means promptly to the purchase at the

market rates, if at rates as high as 20 per cent. The revenues and expenditures of the government have been quarterly as follows for the year ending March 31, 1849:—

UNITED STATES REVENUES.					
Quarter ending—	Customs.	Lands.	Miscellaneous.	Loans.	Total.
June 30, 1848...	\$5,883,568	\$781,796	\$85,375	\$4,643,300	\$11,349,039
September 30, 1848...	9,010,000	470,000	101,000	7,674,650	17,255,650
December 31, 1848...	5,181,870	494,498	934,369	7,599,950	14,211,348
March 31, 1849...	8,374,628	389,566	2,181,350	3,734,500	14,680,044
Total.....	\$28,450,066	\$2,185,860	\$3,252,094	\$23,652,400	\$57,496,081

UNITED STATES EXPENDITURES.						
	Civil.	War.	Navy.	Interest.	Loans.	Total.
June 30...	\$1,446,978	\$6,698,470	\$2,395,066	\$1,021,527	\$1,564,000	\$13,126,041
Sept. 30...	3,371,928	8,564,852	2,979,022	161,750	806,800	15,883,342
Dec. 31...	3,864,669	3,803,990	2,680,269	1,510,659	2,403,950	14,272,538
Mar. 31...	2,873,030	2,498,259	2,091,291	167,308	3,510,208	11,130,097
Total...	\$11,556,605	\$21,565,571	\$10,154,648	\$2,861,244	\$8,284,458	\$53,912,516

Paid Mexico under treaty, September quarter, \$3,000,000; December quarter, \$2,147,175; March quarter, \$1,030,059;—Total, \$6,177,234. The December quarter always shows the smallest revenue for the year, yet we find that the regular income, exclusive of loans, for the six months ending with March, has been \$17,556,942, which exceeds the ordinary expenditure for the period by a little more than \$1,000,000, showing a surplus on the least prolific quarter of \$2,000,000 per annum. Under these circumstances money accumulates in the Federal Treasury, as seen in the following official figures:—

GOVERNMENT FUNDS IN TREASURY.			
	On deposit.	Outstanding drafts.	Subject to draft.
September, 1848.....	\$5,688,809 89	\$2,242,014 25	\$3,448,813 75
May, 1849.....	6,974,007 27	1,865,712 00	5,610,263 20
· Increase.....	\$1,285,197 38	.....	\$2,161,449 45

The amount on hand was diminished by the \$1,030,000 paid Mexico in March, in advance of the instalment due in July. The prospect is now, as the duties for April and May, thus far, are more prolific than last year, that the accumulation for the next six months will be still greater, and the inconvenience of funding the Treasury notes, instead of paying them off, will be seriously felt. It may become advisable to pay off Mexico in advance, and, ultimately, to modify the rate of imports, in order to check the swelling revenue, more particularly that the large and increasing exports of domestic produce involve the return of increasing values of merchandise paying duties.

A new banking association, formed under the act of the New York Legislature passed April 18, 1838, is about commencing operations under the name of the "Broadway Bank." It is to be located in Broadway, and the capital stock of \$500,000 divided into 20,000 shares of \$25 each. Its location will be convenient for a large class of retail dealers on that great thoroughfare; and, as the gentlemen who have thus far associated for the purpose are generally men of character and intelligence, its affairs will doubtless be managed in such a manner as to meet the reasonable wishes of stockholders and customers.

COMMERCIAL STATISTICS.

LAKE COMMERCE OF CLEVELAND, OHIO.

G. B. TIBBITS, Deputy Collector of the port of Cleveland, Ohio, furnishes, from the books of the custom-house, under date of January, 1849, the following tabular statements of the trade of that port during the year 1848:—

IMPORTS COASTWISE AT THE PORT OF CLEVELAND DURING THE SEASON OF NAVIGATION OF THE YEAR 1848.

Salt.....bbls.	105,608	\$118,810	Merchandise....pkgs.	68,443	1,711,075
Lumber.....M. feet	6,647	46,469	Staves.....M.	300	12,000
Shingles.....M.	2,152	4,304	Pig iron.....tons	236	6,080
Shingle wood..cords	269	1,126	Articles unenumerated..		207,120
Lake fish.....bbls.	5,553	22,212			
Plaster & water lime	512	768			
Merchandise....tons	19,936	1,993,675	Total value.....		\$4,123,639

EXPORTS COASTWISE FROM THE PORT OF CLEVELAND DURING THE SEASON OF NAVIGATION OF THE YEAR 1848.

Flour.....bbls.	466,429	\$2,332,145	Ir'n, nails, & glass..tons	3,899	\$389,900
Wheat.....bush.	1,232,620	1,232,620	Iron.....pca.	16,284	19,170
Corn.....	662,162	331,081	Pig iron.....tons	2,187	80,830
Oats.....	254,707	63,676	Glass.....boxes	5,485	6,851
Pork.....bbls.	25,553	246,415	Merchandise....pkgs.	2,431	39,015
Butter.....pkgs.	19,273	186,055	Salt.....bbls.	2,900	3,263
Lard.....	7,135	59,052	Staves.....M.	773	30,920
".....tons	118½	14,220	Beef.....trcs.	6,731	67,410
Ashes.....bbls.	440	8,800	Cheese.....boxes	11,511	23,022
Whisk'y & high wines	23,450	227,600	Articles unenumerated..		587,899
Nails.....kegs	8,283	83,140			
Coal.....tons	8,813	22,032	Total value.....		\$6,000,000

IMPORTATION OF FOREIGN PRODUCTS FROM CANADA INTO THE DISTRICT OF CUYAHOGA DURING THE SEASON OF NAVIGATION OF THE YEAR 1848.

Lumber.....feet	2,995,113	\$12,841 05	Salt.....bbls.	402	363 87
Shingles.....M.	2,257½	2,411 13	Dry goods....pkgs.	3	106 59
Shingle wood..cords	1,070	3,303 30	Brandy.....galls.	79	94 09
Pine spars.....No.	205	250 24	Wine.....	66½	129 21
Cedar posts.....	727	147 89	Potatoes.....bush.	43	11 41
Beeswax.....lbs.	54	7 99	Peas.....	25	10 44
Woolen cloth..yards	13½	25 82	Oatmeal.....bbls.	5	27 63
Plaster.....tons	92½	285 18	Lambs.....No.	2	1 58
Fish oil.....bbls.	146	1,783 92	Horse.....	1	25 63
Mackerel.....	300	905 48	Sheep skins.....	100	20 50
Pig iron.....tons	59½	1,095 51	Wool.....lbs.	114	9 35
Porter.....bbls.	36	12 78			
Building stone..toise.	32½	68 65	Total value.....		\$23,939 23

EXPORTS TO CANADA DURING THE SEASON OF NAVIGATION OF THE YEAR 1848, FROM THE PORT OF CLEVELAND, OHIO.

Flour.....bbls.	6,571	\$29,642	Coal.....tons	2,648	\$6,622
Pork.....	1,885	15,985	Beef.....trcs.	150	1,950
Corn meal.....	787	1,967	Tallow.....casks	1,420	26,728
Lard.....	109	1,090	Fruit trees.....bbls.	65	211
Salt.....	280	356	Hemp.....bales	55	450
Whiskey.....	50	400	Groceries and sundries..		12,431
Clover seed.....	81	891			
Corn.....bush.	29,415	11,982	Total value.....		\$142,372
Wheat.....	85,186	31,667			

NUMBER OF VESSELS, AND THEIR TONNAGE, EMPLOYED IN FOREIGN COMMERCE DURING THE YEAR 1848, DISTRICT OF CUYAHOGA.

	Entered.		Cleared.	
	No.	Tons.	No.	Tons.
British vessels.....	76	8,454	72	8,364
American vessels.....	106	9,972	74	6,107
Total.....	182	18,426	146	14,371

IMPORTS OF IRON AND STEEL INTO THE UNITED STATES.

The Hon. CHARLES HUDSON, a member of the Committee of Ways and Means, to whom was referred the subject of duties on imports, made an elaborate report on the 28th of February, 1849. (The 30th Congress, 2d Session, Report No. 129.) In the Appendix to this Report we find a tabular statement of the imports of iron, and manufactures of iron, and iron and steel during the year ending June 30, 1848; showing, also, the rate and amount of duties under the tariff of 1842 and of 1846. From that statement we extract the following table, which shows the imports of iron, and manufactures of iron, and iron and steel in the year 1848. The rate of duty on the tariff of 1846, on all the articles specified below, is 30 per cent. The tariff of 1842 varies, being a 30 per cent duty on twenty-seven of the articles specified, and on the remainder, more than one-half, a specific duty on the pound weight. From this statement it will be perceived that the duties on the imports of iron, &c., below, in 1848, under the tariff of 1846, amounted to \$3,736,233; while, under the tariff of 1842, the duty on the same quantity and value of imports would have amounted to \$5,630,289, showing, according to Mr. Hudson, an excess, in favor of the high tariff of 1842, of \$1,894,056.

IMPORTS OF IRON, AND MANUFACTURES OF IRON, AND IRON AND STEEL, FROM DECEMBER 1, 1846, TO JUNE 30, 1847, SHOWING THE AMOUNT OF DUTIES UNDER THE TARIFF OF 1846, WITH THE AMOUNT OF DUTIES UNDER THE TARIFF OF 1842, ON THE SAME IMPORTS.

Species of manufacture, &c.	Quantity.	Iron, and manufactures of iron and steel.		Duties under tariff of 1846.		Duties under tariff of 1842.	
		No.	Value.	No.	Value.	No.	Value.
Muskets and rifles.....	No. 1,216		\$2,395		\$718 50		\$718 50
Fire-arms, not specified.....			101,163		30,345 90		30,345 90
Side-arms.....			927		278 10		278 10
Drawing and cutting-knives.....			5,394		1,618 20		1,618 20
Hatchets, axes, and adzes.....			1,315		394 50		394 50
Socket chisels.....			3,082		924 60		924 60
Steelyards and scale beams.....			5,377		1,613 10		1,613 10
Vices.....			20,135		6,040 50		6,040 50
Sickles or reaping-hooks.....			2,142		642 60		642 60
Scythes.....			14,964		4,489 20		4,489 20
Spades and shovels.....			2,898		869 40		869 40
Squares.....			1,020		306 00		306 00
Needles, sewing, darning, and other			103,167		20,633 40		20,633 40
Cast iron butts or hinges.....			5,019		1,505 70		1,505 70
Cutlery, not specified.....			371,338		111,401 40		111,401 40
All other manufactures of iron, &c.			1,760,118		528,033 90		528,033 90
Wire, bonnet.....	lbs. 41,255		3,794		1,138 20		4,125 50
“ not above No. 14.....	126,327		7,773		2,331 90		6,316 36
“ above No. 14.....	5,345		1,062		315 60		507 77
Nails, cut or wrought.....	745,913		52,803		15,840 90		29,836 52
Spikes, cut or wrought.....	7,101		265		79 50		213 08
Chain cables and parts thereof...	5,541,161		207,802		62,340 60		138,528 52
Mill-saws, cross-cut, & pit-saw.....	No. 189		490		147 00		189 00
Anchor, and parts thereof.....	lbs. 336,697		18,665		5,599 50		8,417 42
Anvils.....	1,025,882		64,871		19,461 30		25,647 05
Hammers and sledges, for black-							
smiths.....	22,290		1,356		406 80		557 25

Sad irons, tailors' & hatters' irons.	22,613	\$625	\$187 50	\$565 32
Castings, vessels of.....	121,744	4,638	1,391 40	1,826 16
" all other	443,345	9,218	2,765 40	4,433 45
Braziers' rods, round or square from 3-16 to 10-16 inch in diameter..	642,321	16,349	4,904 70	16,058 02
Nail or spike rods.....	347,186	7,994	2,398 20	8,179 65
Casement rods, band, scroll, &c....	365,831	3,736	1,120 80	9,145 77
Sheet iron.....	10,711,682	868,181	110,454 30	267,792 05
Hoop iron.....	1,251,384	30,861	9,258 30	31,284 60
Pig iron.....cwt.	467,549	472,088	141,626 40	210,397 05
Old and scrap.....	32,868	34,868	10,460 40	16,434 00
Bar iron, manufactured by rolling.	641,708	1,695,178	508,551 90	802,135 00
" " otherwise.	99,961	266,386	79,915 80	84,966 85
Total.....		\$5,669,427	1,690,511 40	2,377,371 23

IMPORTS OF IRON, AND MANUFACTURES OF IRON, AND IRON AND STEEL, DURING THE YEAR
ENDING JUNE 30, 1848, SHOWING THE AMOUNT OF DUTIES UNDER THE TARIFF OF 1846,
WITH THE AMOUNT OF DUTIES UNDER THE TARIFF OF 1842, ON THE SAME IMPORTS.

Species of manufacture, &c.	Quantity.	Value.	Duties. under tariff of 1846.	Duties. under tariff of 1842.
Musket and rifles.....No.	11	\$75	\$22 50	\$22 50
Fire-arms, not specified.....		302,269	90,680 70	90,680 70
Side-arms.....		5,645	1,693 50	1,693 50
Drawing knives.....		21,343	6,402 90	6,402 90
Hatchets, axes, and adzes.....		4,043	1,212 90	1,212 90
Socket chisels.....		12,163	3,648 90	3,648 90
Steelyards and scale beams.....		13,602	4,080 60	4,080 60
Vices.....		37,415	11,224 50	11,224 50
Sickles or reaping hooks.....		2,481	744 30	741 30
Scythes.....		29,823	8,946 90	8,946 90
Sad irons, tailors' & hatters' irons.		1,429	428 70	428 70
Spades and shovels.....		6,629	1,988 70	1,988 70
Squares.....		4,381	1,314 30	1,314 30
Needles, sewing, darning, & other.		218,330	43,666 00	43,666 00
Cast iron butts or hinges.....		21,000	6,300 00	17,500 00
Cutlery, not specified.....		1,146,843	344,052 90	344,052 90
Other manufactures, not specified.		3,590,928	1,077,278 40	1,077,278 40
Bonnet wire.....lbs.	509,979	25,047	7,514 10	50,997 90
Wire not above No. 14.....	758,954	38,006	11,401 80	75,895 40
" above No. 14.....	76,721	6,079	1,223 70	7,288 49
Tacks, brads, and sprigs, not above 6 oz. per.....thousand	574	124	37 20	28 70
Nails, cut or wrought.....lbs.	1,347,793	88,390	26,517 00	53,911 72
Spikes, cut or wrought.....	9,451	444	133 20	283 53
Chain cables.....	9,331,452	369,574	110,872 20	233,286 30
Mill-saws, cross-cut, & pit-saws.No.	7,077	8,016	2,404 80	7,077 00
Anchor, and parts thereof.....lbs.	948,493	42,441	12,734 70	23,712 32
Anvils, and parts thereof.....	1,911,991	117,606	35,281 80	47,799 77
Hammers and sledges, for black- smiths.....	96,778	5,288	1,586 40	2,419 45
Castings, vessels of.....	467,575	15,665	4,699 50	7,013 62
" all other.....	454,222	16,798	5,039 40	4,543 22
Braziers' rods, from 3-16 to 10-16 inch diameter.....	541,597	13,296	3,988 80	13,539 92
Nail or spike rods.....	564,795	4,734	1,420 20	14,119 87
Casement rods, band, or scroll iron	603,548	16,720	5,016 00	15,068 70
Hoop iron.....	4,081,637	104,643	31,392 90	102,044 92
Sheet iron.....	17,718,530	625,312	187,593 60	442,963 25
Pig iron.....	1,032,641	815,415	244,624 50	464,688 45
Old and scrap iron.....	132,600	140,087	42,011 10	66,300 00
Bar iron, manufactured by rolling.	1,631,786	3,679,598	1,103,879 40	2,039,732 50
" " otherwise.	403,127	975,214	292,564 20	342,675 95
Total.....		\$12,526,954	3,736,233 90	5,630,299 63

TOBACCO TRADE OF ROTTERDAM AND AMSTERDAM.

We give below, from an authentic source, a comparative statement of imports, sales, and stocks in Rotterdam and Amsterdam for the last ten years:—

	VIRGINIA AND KENTUCKY.			MARYLAND.		
	Imports.	Deliveries.	Stock.	Imports.	Deliveries.	Stock.
1839.....	1,516	1,230	848	10,050	10,443	5,443
1840.....	4,628	4,897	582	23,914	21,121	8,217
1841.....	4,489	2,859	2,185	17,447	18,435	7,239
1842.....	14,820	11,119	5,929	21,828	20,648	8,399
1843.....	14,281	8,432	11,772	14,651	18,505	4,545
1844.....	9,860	8,860	12,772	20,825	19,477	5,698
1845.....	5,375	6,665	11,214	29,621	23,575	11,477
1846.....	1,919	4,810	8,677	16,123	20,495	7,148
1847.....	1,319	3,744	6,317	20,746	14,246	18,450
1848.....	1,398	2,853	4,834	10,486	16,257	7,806

IMPORTS IN 1848.

	Maryland.	Virginia.	Kentucky.	Stems.
Rotterdam.....	6,946	659	634	1,023
Amsterdam.....	3,540	106	...	96
Total.....	10,486	765	634	1,120

DELIVERIES.

Rotterdam.....	8,849	1,903	305	73
Amsterdam.....	7,408	1,903	249	225
Total.....	16,257	2,299	554	298

STOCKS, DECEMBER 31.

Rotterdam.....	1,966	2,029	731	214
Amsterdam.....	5,840	1,001	1,078	150
Total.....	7,806	3,030	1,804	264

IMPORTS AND EXPORTS OF WHEAT AND FLOUR INTO THE UNITED STATES.

TABLE OF IMPORTS AND EXPORTS OF THE UNITED STATES OF WHEAT AND FLOUR, IN BUSHELS, TOGETHER WITH THE VALUE OF THE SAME, FROM 1831 TO 1848, INCLUSIVE.

Years.	EXPORTS.		IMPORTS.		EXCESS.
	BusheLS.	Value.	BusheLS.	Value.	
1831.....	9,441,090	\$10,461,715	633	\$699	9,440,457
1832.....	4,407,899	4,974,123	1,191	1,180	4,406,708
1833.....	4,811,061	5,642,602	1,697	1,716	4,809,364
1834.....	4,213,708	4,560,379	1,307	1,295	4,212,401
1835.....	3,914,742	4,446,182	311,805	268,623	3,632,937
1836.....	2,529,062	3,574,561	650,629	565,500	1,878,433
1837.....	1,610,898	3,014,415	4,000,000	4,276,976	*2,389,102
1838.....	2,247,096	3,617,724	927,180	940,838	1,319,916
1839.....	4,712,060	7,069,361	41,725	57,747	4,670,355
1840.....	11,198,365	11,779,098	1,436	1,069	11,196,929
1841.....	8,447,670	8,582,527	652	900	8,447,018
1842.....	7,237,968	8,292,308	4,153	3,796	7,233,815
1843.....	4,519,055	4,027,182	12,121	8,542	4,506,984
1844.....	7,751,587	7,232,989	1,611	1,664	7,749,501
1845.....	6,365,866	5,735,372	351	287	6,365,515
1846.....	13,061,175	13,350,644	822	633	13,060,353
1847.....	26,312,431	\$2,183,161	20,364	22,878	26,292,067
1848.....	12,631,669	15,863,284	369,929	357,639	12,561,740
Average...	7,523,410	\$8,647,762	352,639	\$361,791	6,910,852

* Imports.

COMMERCE OF EACH STATE AND TERRITORY OF THE UNITED STATES.

STATEMENT OF THE COMMERCE OF EACH STATE AND TERRITORY FROM JULY 1, 1847, TO THE 30TH DAY OF JUNE, 1848.

STATES.	VALUE OF EXPORTS.				VALUE OF IMPORTS.			
	Domestic produce.		Foreign produce.		Total of American and Foreign produce.		Total.	
	In American vessels.	In Foreign vessels.	In American vessels.	In Foreign vessels.	Total.	In American vessels.	In Foreign vessels.	Total.
Maine.....	\$1,844,259	\$92,747	\$1,937,006	\$17,760	\$2,029,436	\$674,606	\$120,959	\$795,565
New Hampshire.....	6,229	1,578	7,807	436	8,243	56,080	5,223	61,303
Vermont.....	299,269	.....	299,269	234,838	534,102	308,005	.....	306,005
Massachusetts.....	7,980,002	1,328,835	9,308,837	1,484,559	10,793,396	21,789,484	6,908,273	28,647,707
Rhode Island.....	214,408	1,452	215,860	6,771	222,631	388,145	13,445	361,590
Connecticut.....	501,064	.....	501,064	.....	501,064	219,420	9,890	229,310
New York.....	28,706,862	10,064,347	38,771,209	10,865,723	49,636,932	79,547,167	14,977,974	94,525,141
New Jersey.....	.....	62	62	.....	62	498	1,887	1,885
Pennsylvania.....	4,425,965	1,002,324	5,428,309	282,006	5,710,315	11,105,463	1,042,122	12,147,584
Delaware.....	88,089	.....	88,089	19	88,108	102	388	490
Maryland.....	5,422,217	1,593,817	7,016,038	86,548	7,102,586	4,789,384	608,959	5,343,643
District of Columbia.....	83,666	.....	83,666	.....	83,666	25,938	.....	25,938
Virginia.....	2,842,836	887,222	3,670,058	1,418	3,684,476	197,848	17,788	215,081
North Carolina.....	296,852	48,876	345,728	.....	345,728	186,538	9,275	195,814
South Carolina.....	4,583,022	2,498,895	7,081,917	.....	7,081,917	1,115,738	369,561	1,485,299
Georgia.....	1,619,816	2,050,599	3,670,415	.....	3,670,415	138,416	88,698	217,114
Florida.....	1,247,189	649,494	1,896,683	.....	1,896,683	46,084	18,233	64,267
Alabama.....	7,637,903	4,282,790	11,920,693	2,792	11,923,485	195,184	224,262	419,396
Louisiana.....	27,641,569	11,708,579	39,350,148	1,504,840	40,854,988	7,585,017	1,845,422	9,380,439
Mississippi.....	.....	.....	.....	.....	.....	.....	.....	.....
Tennessee.....	.....	.....	.....	.....	.....	10,001	.....	10,001
Missouri.....	.....	.....	.....	.....	.....	148,560	.....	148,560
Ohio.....	8,870	136,729	145,600	.....	145,600	181,382	5,894	186,726
Kentucky.....	.....	.....	.....	.....	.....	25,971	.....	25,971
Michigan.....	57,471	53,723	111,194	441	111,635	115,760	.....	115,760
Illinois.....	41,885	.....	41,885	.....	41,885	1,265	3,080	4,365
Texas.....	254	11,835	12,089	131,309	143,610	2,561	91,463	94,024
Total.....	95,514,217	87,859,904	182,904,121	14,118,019	197,022,140	128,647,232	26,861,696	154,908,928

NAVIGATION OF EACH STATE AND TERRITORY OF THE UNITED STATES.

STATEMENT OF THE NAVIGATION OF EACH STATE AND TERRITORY FROM JULY 1, 1847, TO THE 30TH DAY OF JUNE, 1848.

STATES.	AMERICAN.						FOREIGN.						TOTAL AMERICAN AND FOREIGN.					
	No.	Tons.	Men.	Boys.	No.	Tons.	Tons.	Men.	Boys.	No.	Tons.	Tons.	Men.	Boys.	No.	Tons.	Tons.	Men.
Maine.....	733	152,026	5,886	150	566	39,448	3,466	54	1,299	191,474	8,352	204						
New Hampshire.....	12	3,229	102	8	45	2,639	169	20	57	5,868	271	28						
Vermont.....	285	74,416	3,775	....	....	....	....	....	285	74,416	3,775	....						
Massachusetts.....	1,295	296,883	13,864	500	2,311	192,787	12,279	149	3,606	489,670	20,143	649						
Rhode Island.....	103	19,316	909	43	28	3,148	172	....	131	22,566	1,081	43						
Connecticut.....	111	23,500	1,520	89	37	4,318	221	....	148	27,813	1,741	89						
New York.....	4,430	1,004,316	89,680	1,856	3,288	706,373	38,280	1,314	7,668	1,709,689	77,960	3,670						
New Jersey.....	....	....	....	....	2	220	20	....	2	220	20	....						
Pennsylvania.....	342	77,870	3,305	149	134	20,218	1,054	22	476	98,088	4,859	171						
Delaware.....	14	2,466	116	....	6	3,612	134	....	20	6,078	240	....						
Maryland.....	406	84,709	3,695	....	137	36,221	1,537	....	543	120,930	5,282	....						
District of Columbia.....	9	1,552	73	....	....	....	....	....	9	1,552	73	....						
Virginia.....	234	48,390	2,102	10	73	16,972	788	3	307	65,792	2,840	13						
North Carolina.....	248	37,383	1,733	5	27	4,323	193	....	276	41,706	1,926	5						
South Carolina.....	217	53,854	2,117	7	142	42,552	1,634	189	359	96,406	3,751	196						
Georgia.....	54	17,871	660	4	54	31,321	891	189	116	49,192	1,551	143						
Florida.....	93	18,208	811	1	49	7,518	479	21	142	25,724	1,290	22						
Alabama.....	146	67,574	2,098	139	82	49,359	1,616	107	238	116,933	3,714	246						
Louisiana.....	667	287,987	9,831	....	362	148,612	5,785	....	1,029	436,499	15,586	....						
Mississippi.....	....	....	....	....	....	....	....	....	....	....	....	....						
Tennessee.....	....	....	....	....	....	....	....	....	....	....	....	....						
Missouri.....	....	....	....	....	....	....	....	....	....	....	....	....						
Ohio.....	78	7,065	395	....	60	5,863	338	....	188	12,918	768	....						
Kentucky.....	....	....	....	....	....	....	....	....	....	....	....	....						
Michigan.....	190	180,800	5,080	1,770	273	87,614	4,784	....	488	268,414	9,614	1,770						
Illinois.....	3	807	35	....	....	....	....	....	3	807	35	....						
Texas.....	15	730	61	....	8	2,057	92	7	23	2,787	153	7						
Total.....	9,695	2,461,980	97,848	4,731	7,494	1,404,169	73,847	2,425	17,399	3,865,439	170,715	7,356						

Total.

NAVIGATION OF EACH STATE AND TERRITORY OF THE UNITED STATES—CONTINUED.

STATEMENT OF THE NAVIGATION OF EACH STATE AND TERRITORY FROM JULY 1, 1847, TO THE 30TH DAY OF JUNE, 1848.

TONNAGE ENTERED INTO THE UNITED STATES.

STATES.	American.				Foreign.				Total American and Foreign.			
	No.	Tons.	Men.	Boys.	No.	Tons.	Men.	Boys.	No.	Tons.	Men.	Boys.
Maine.....	323	74,678	2,730	22	562	38,441	2,623	44	885	113,114	5,353	66
New Hampshire.....	14	4,408	139	13	47	2,784	179	22	61	7,192	318	35
Vermont.....	291	79,423	3,962	...	...	...	...	...	291	79,423	3,962	...
Massachusetts.....	1,513	356,750	15,566	569	2,316	192,226	12,878	25	3,828	548,976	28,444	614
Rhode Island.....	119	21,579	1,061	43	34	3,787	213	...	153	25,366	1,274	43
Connecticut.....	109	27,691	1,597	13	41	4,235	286	...	150	31,926	1,833	13
New York.....	4,979	1,149,005	45,592	1,818	3,269	716,451	37,746	1,828	8,248	1,865,456	83,388	3,646
New Jersey.....	1	185	8	...	5	550	39	...	6	735	47	...
Pennsylvania.....	390	99,772	4,046	191	184	20,015	1,080	50	524	119,787	5,126	241
Delaware.....	1	134	5	...	8	4,472	156	...	9	4,606	161	...
Maryland.....	361	74,188	3,269	...	118	28,342	1,282	...	479	102,530	4,551	...
District of Columbia.....	4	713	35	...	...	...	...	...	4	713	35	...
Virginia.....	103	18,978	864	8	50	8,861	426	3	153	27,139	1,290	11
North Carolina.....	183	22,877	1,095	6	27	4,196	194	...	190	27,073	1,289	5
South Carolina.....	138	27,434	1,184	5	117	35,073	1,369	194	255	62,507	2,553	199
Georgia.....	39	7,024	317	...	51	30,218	875	178	90	37,242	1,192	178
Florida.....	90	11,080	568	5	51	8,018	585	36	141	19,098	1,103	41
Alabama.....	55	16,135	555	32	76	45,491	1,525	93	131	61,626	2,080	125
Louisiana.....	625	208,916	7,611	...	370	165,678	6,342	...	995	369,594	13,953	...
Mississippi.....	...	...	...	...	...	...	...	...	...	...	...	...
Tennessee.....	...	...	...	...	...	...	...	...	...	...	...	...
Missouri.....	...	...	...	...	...	...	...	...	...	...	...	...
Ohio.....	109	11,222	611	...	66	5,857	371	...	175	17,079	982	...
Kentucky.....	...	...	...	...	...	...	...	...	...	...	...	...
Michigan.....	190	180,800	5,080	1,770	279	87,776	4,791	...	469	268,575	9,871	1,770
Illinois.....	12	4,205	143	...	2	399	34	...	14	4,604	177	...
Texas.....	14	1,990	85	1	9	2,327	104	8	23	4,317	189	9
Total.....	9,643	3,393,483	96,123	4,515	7,631	1,406,191	73,998	2,481	17,274	3,799,673	169,121	6,996

RAILROAD, CANAL, AND STEAMBOAT STATISTICS.

THE RAILROADS FROM ALBANY TO BUFFALO.

THE several railroads forming the line between Albany and Buffalo are owned by seven distinct corporations, namely, the Albany and Schenectady, Utica and Schenectady, Utica and Syracuse, Auburn and Syracuse, Auburn and Rochester, Tonawanda, and the Attica and Buffalo.

The *Albany and Schenectady*, or Mohawk and Hudson Railroad, was chartered April 17, 1826, without any restrictions as regards the rate of fare for passengers, and still remains uncontrolled.

The *Utica and Schenectady Railroad Company* was chartered April 29, 1833, and the fare for passengers limited to four cents per mile per passenger, and so remains at present.

The *Syracuse and Utica Railroad Company* was chartered May 11, 1836. The authorized fare for passengers, four cents per mile, as it still remains.

The *Auburn and Syracuse Railroad Company* was chartered May 1, 1834. Its fare for passengers restricted to four cents per mile per passenger. This road suffered under some embarrassments, and, by act of April 26, 1839, was allowed to charge five cents per mile per passenger for three years.

The *Auburn and Rochester Railroad Company* was chartered May 13, 1836. Authorized fare for passengers, three cents per mile. It was found difficult to procure the stock to be taken with this restriction at that time, and, by act of January 26, 1837, it was authorized to charge four cents per mile, when the stock was taken, and the road built.

The *Tonawanda Railroad Company* was chartered April 24, 1832, without any restriction as to rate of fare for passengers. By act of February 7, 1844, it was restricted to four cents per mile for passengers, and the law so remains.

The *Attica and Buffalo Railroad Company* was chartered May 3, 1836, and its fare for passengers restricted to three cents per mile per passenger, and so remains at present.

In all these charters there is a provision that the State may appropriate the road after ten, and within fifteen years upon the payment of the cost of construction, with 10 per cent interest thereon; and provision is made in all the charters for an annual report of the business to the Secretary of State.

These railroads have uniformly insisted that, although there was a provision in each of the charters, that the Legislature might alter or repeal it, yet as to fare, they could only change it by taking the road under the above provision.

Propositions for the reduction of the fare of railroads have been brought forward in the Legislature of New York from year to year, and perhaps every year for the last five years. In 1845, a bill for this purpose was reported in the Assembly, which was recommitted to the railroad committee. A remonstrance of the railroad companies against such legislation was presented and printed. In this remonstrance the rights of the companies are forcibly reasoned. This was followed by a report of the committee on railroads against interfering with railroad fares.

At subsequent sessions, proposition to reduce railroad fares received no favor from the Legislature until 1848.

In 1848, a bill for the reduction of railroad fares was introduced into the Assembly by the committee on railroads, and passed that body, but was lost in the Senate. This bill did not give a rate per mile, but prescribed the charge for carrying a passenger over the entire road of each of the corporations. The bill proposed a reduction of 25 per cent in the fare between Albany and Buffalo, but did not distribute it equally over all the roads on the line.

At the same session the general railroad act became a law, and indicated the policy of the State as to railroad fares. By § 19, sub. 9, corporations formed under that act were restricted to three cents per mile per passenger. By § 80, the Legislature reserve the right specifically to reduce the fare, but not to reduce it so as to produce less than 10 per cent per annum on the cost, nor unless, upon examination of the returns, to be made by the State Engineer and Controller, it shall appear that the net income shall have exceeded 10 per cent upon the capital. By § 28, these returns are required to be made. By § 46, these provisions are made applicable to existing corporations.

From all this it appears that, even if the Legislature deem that they have the entire power to reduce the fares, they cannot, at least they have pledged themselves not to reduce, unless the report of the State Engineer and Controller shows that the roads have made more than 10 per cent on their capital.

The following table shows the old rate of fare, the length of each road, the reduced rate which took effect 1st November, 1848, and the rate per mile of such reduced fare:—

	Length of road in miles.	Old rate of fare.	New rate of fare now in force.	Rate per mile of new fare.
Albany and Schenectady...	17	\$0 50	\$0 50	2.94
Utica and Schenectady.....	78	3 00	2 25	2.88
“ Syracuse.....	53	2 00	1 50	2.83
Auburn and Syracuse.....	26	1 00	0 80	3.07
“ Rochester.....	78	3 00	2 50	3.20½
Tonawanda.....	43½	1 56	1 30	2.98
Attica and Buffalo.....	31	0 94	0 90	2.90
Total.....	326½	\$12 00	\$9 75	2.98½

The companies have run at the rates specified in the second column for several years. They have commenced a reduction, and it is not probable that they will find it for their interest to go back, as all experience shows that a minimum low rate of fare is the most productive. The point at which the interests of the public meet is that where the companies can carry the greatest number of passengers, and secure to themselves a remunerating income.

The following table, compiled from legislative documents, shows the number of passengers carried over each of the seven roads during the years 1844 to 1848, inclusive:

PASSENGERS CARRIED ON THE RAILROADS.

	1844.	1845.	1846.	1847.	1848.
Albany and Schenectady....	132,685	158,541	174,653	229,401	236,889
Utica and Schenectady.....	161,849½	161,650	221,818½	266,534	270,413
Syracuse and Utica.....	121,746½	123,534	155,279½	198,512	216,807
Auburn and Syracuse.....	90,254	87,244½	105,809½	140,605½	154,216
“ Rochester.....	121,369	119,760	142,255	189,345	209,259
Tonawanda.....	79,532½	73,130	92,387½	124,068	148,443½
Attica and Buffalo.....	63,949½	71,847½	78,633	130,799	146,235

The total embraces both through and way passengers, and the receipts would better show the amount of business done, which we give in a tabular form as follows:—

RECEIPTS FROM PASSENGERS.

	1844. Dollars.	1845. Dollars.	1846. Dollars.	1847. Dollars.	1848. Dollars.
Albany and Schenectady.	66,298 81	79,644 85	92,194 67	110,051 67	113,741 83
Utica and Schenectady..	306,278 75	358,810 11	347,535 51	509,782 26	566,884 81
Syracuse and Utica.....	181,647 34	182,484 78	229,708 56	285,941 61	296,831 98
Auburn and Syracuse ...	80,533 17	79,500 29	98,051 71	123,848 04	132,667 55
“ Rochester...	215,246 95	214,143 29	253,078 21	334,710 81	358,501 30
Tonawanda.....	92,639 06	89,896 98	111,583 09	155,993 48	169,963 27
Attica and Buffalo.....	64,339 97	58,975 93	72,405 55	104,010 23	119,446 47

During the period embraced by these tables, the cost of construction or capital has been greatly increased—in some cases doubled by the construction of the roads. And the yearly expenses have also been greatly increased, so that much larger receipts in 1849 are required to pay interest on the cost than in 1844.

Other tables might be made showing what were the receipts and cost of each road per mile, all of which would tend to show that the eastern roads could bear a greater reduction than the western roads, because they do a larger business. All these calculations should be entered into before any reduction is made, as the reduction should be governed by the rate per cent of profit and not by the rate of fare per mile, which is arbitrary.

TOLLS RECEIVED ON THE NEW YORK STATE CANALS.

The following tables, showing the aggregate amount of tolls received at each Collector's office, on each canal, during the season of navigation in 1847 and 1848, also the increase or diminution at each office during the same period, have been carefully compiled from the returns made to the Canal Department of the State of New York:

ERIE CANAL.				
Offices.	1847.	1848.	Increase.	Decrease.
New York.....	\$128,971 28	\$131,442 90	\$2,471 62	.....
Albany.....	351,839 32	359,110 17	7,270 85	.....
West Troy.....	812,612 33	344,302 84	31,690 51	.....
Schenectady.....	8,405 07	9,857 28	1,452 21	.....
Fultonville.....	14,119 08	12,703 28	.....	\$1,415 80
Little Falls..	12,869 57	12,195 76	.....	673 81
Utica.....	53,938 86	55,023 93	1,085 07	.....
Rome.....	42,866 30	37,582 72	.....	5,273 58
Syracuse.....	98,733 55	105,938 14	7,204 59	.....
Montezuma.....	96,448 30	98,185 87	.....	3,262 43
Lyons.....	19,984 99	21,686 75	1,751 76	.....
Palmyra.....	51,354 86	50,026 65	.....	1,328 21
Rochester.....	223,862 75	202,808 61	.....	21,054 14
Brockport.....	13,602 86	38,760 43	25,157 57	.....
Albion.....	66,293 65	26,125 56	.....	40,168 09
Lockport.....	84,023 84	137,682 94	53,659 10	.....
Black Rock.....	133,502 50	260,022 01	126,519 51	.....
Buffalo.....	1,216,700 96	672,618 09	.....	544,082 87
Waterford.....	3,916 74	3,498 34	.....	418 40
Salina.....	20,624 21	19,083 40	.....	1,540 81
Oswego.....	183,067 21	176,078 96	.....	6,988 25
Geneva.....	54,695 80	51,680 22	.....	3,015 58
Havana.....	6,753 46	8,212 27	1,458 51	.....
Horse Head.....	32,948 03	26,580 92	.....	6,367 11
Corning.....	26,973 05	25,048 82	.....	1,924 23
Dresden.....	6,655 40	6,680 63	25 23	.....
Penn Yan.....	17,662 91	16,228 35	.....	1,434 56
Oxford.....	5,338 89	2,609 86	.....	3,229 03
Binghamton.....	5,101 21	3,244 01	.....	1,857 20
Scottsville.....	21,670 09	20,590 24	.....	1,079 85
Higgins.....	.....	124 68	124 68	.....
Dansville.....	17,370 29	17,147 13	.....	223 16
Total.....	\$3,333,347 36	\$2,947,881 76	\$259,871 51	\$645,337 11
CHAMPLAIN CANAL.				
New York.....	\$473 17	\$39 90	.....	\$433 27
Albany.....	6,293 51	6,297 04	\$3 53	.....
West Troy.....	37,753 80	40,208 86	2,455 06	.....
Waterford & Seneca Lake.	4,048 99	7,466 82	3,417 83	.....
Schuylerville.....	14,647 16	13,027 59	.....	1,619 57
Whitehall.....	56,881 17	50,460 45	.....	6,420 72
Total.....	\$120,097 80	\$117,500 66	\$5,876 42	\$8,473 56
CATUGA AND SENECA CANAL.				
Montezuma.....	\$10,077 87	\$10,860 52	\$782 65	.....
Geneva.....	7,642 08	7,492 39	.....	\$149 69
Havana.....	862 56	990 21	127 65	.....
Horse Head.....	4,320 80	3,773 47	.....	547 33
Corning.....	3,304 31	2,994 28	.....	310 03
Dresden.....	726 87	739 45	12 58	.....
Penn Yan.....	1,991 44	1,963 88	.....	27 56
Total.....	\$28,925 93	\$28,814 20	\$922 88	\$1,084 61

OSWEGO CANAL.				
Salina.....	\$27,704 26	\$30,597 89	\$2,893 63	.....
Oswego.....	50,229 08	49,186 04	.....	\$1,043 04
Total.....	\$77,933 34	\$79,783 93	\$2,893 63	\$1,043 04
CHEMUNG CANAL.				
Havana.....	\$3,389 11	\$3,655 31	\$266 20	.....
Horse Head.....	5,905 84	5,767 09	.....	\$138 75
Corning.....	7,882 75	6,768 85	.....	613 90
Total.....	\$16,677 70	\$16,191 25	\$266 20	\$752 65
CROOKED LAKE CANAL.				
Dresden.....	\$730 11	\$515 06	.....	\$215 05
Penn Yan.....	1,216 39	1,306 64	\$90 25	.....
Total.....	\$1,946 50	\$1,821 70	\$90 25	\$215 05
CHENANGO CANAL.				
Utica.....	\$11,860 16	\$17,181 15	\$5,820 99	.....
Hamilton.....	4,158 47	4,232 04	73 57	.....
Oxford.....	6,455 21	5,754 03	.....	\$701 18
Binghamton.....	6,596 49	5,090 73	.....	1,505 76
Total.....	\$28,570 33	\$32,257 95	\$5,894 56	\$2,206 94
GENESEE VALLEY CANAL.				
Rochester.....	\$6,952 32	\$7,910 72	\$958 40	.....
Scottsville.....	11,439 87	10,590 32	.....	\$849 55
Dansville.....	8,315 06	8,221 06	.....	93 96
Total.....	\$26,707 25	\$26,722 12	\$958 40	\$943 33
ONEIDA LAKE CANAL.				
Higgins.....	\$624 74	\$688 97	\$64 23	.....
SENECA RIVER TOWING-PATH.				
Salina.....	\$372 96	\$469 74	\$96 78	.....
ONEIDA RIVER IMPROVEMENT.				
Salina.....	\$176 07	\$235 08	\$50 01	.....

The following table shows the gross amount of tolls, &c., collected on each canal during the years 1847 and 1848:—

Canals.	1847.	1848.	Increase.	Decrease.
Erie.....	\$3,333,347 36	\$2,947,881 76	.....	\$385,465 60
Champlain.....	120,097 80	117,500 66	.....	2,597 14
Oswego.....	77,933 34	79,783 93	\$1,850 59	.....
Cayuga and Seneca.....	28,925 95	28,814 20	.....	111 75
Chemung.....	16,677 70	16,191 25	.....	486 45
Crooked Lake.....	1,946 50	1,831 70	.....	124 80
Chenango.....	28,570 33	32,257 95	3,687 62	.....
Genesee Valley.....	26,707 25	26,722 12	14 76	.....
Oneida Lake.....	624 74	688 97	64 23	.....
“ River Improvement	176 07	235 08	59 01	.....
Seneca River towing-path.	372 96	469 74	96 78	.....
Total.....	\$3,335,380 00	\$3,252,367 34	\$5,773 08	\$388,785 74

COMPARATIVE COST OF RAILROADS.

The *American Railroad Journal* gives the following interesting statement of the length, cost per mile, and total cost of the railroads in the United States, Canada, Cuba, and Europe. According to this account it will be seen that the cost of the

railroads in the United States is less per mile than in any other country in the world, with the exception of Holland and the Island of Cuba.

Countries.	Miles.	Av. cost per mile.	Total.
United States.....	6,421	\$80,000	\$192,680,000
Canada.....	54	30,000	1,620,000
Cuba.....	250	28,888	7,000,000
Total in America.....	6,725		\$200,250,000
United Kingdom.....	4,420	145,000	640,900,000
France.....	1,250	110,000	137,500,000
Germany.....	3,370	50,000	168,500,000
Belgium.....	495½	80,000	39,640,000
Holland.....	162½	25,000	4,062,500
Denmark and Holstein.....	282	40,000	11,280,000
Switzerland.....	78	50,000	3,600,000
Italy.....	162½	90,000	14,625,000
Russia.....	113	60,000	6,780,000
Poland.....	187½	50,000	9,375,000
Hungary.....	157	50,000	7,850,000
Total in Europe.....	10,678		\$1,044,402,500
“ America.....	6,725		200,250,000
Grand total.....	17,403		\$1,244,652,500

The above embraces all the railways in operation, except a short line of 15 miles recently opened in Spain, from Barcelona to Mataro, from which no returns are obtained.

These vast sums, above stated, have all been expended for railways within the last twenty years. It may be safely asserted that the roads now in progress, including all those which will be completed within the next *five* years, will represent an additional amount of capital equal to the sums expended upon those already finished. The speculative feelings of 1845, in England, pushed forward many schemes that have since been discarded; and the stringent law, which required a deposit of 20 per cent of the capital before the taking effect of the grant of authority to build, had the effect to reduce the number of speculative schemes at once. In no other country in Europe has the railway spirit exceeded the limits of legitimate speculation.

STATISTICS OF RAILROAD CORPORATIONS.

The following act of the New York Legislature, entitled “An act to amend an act entitled ‘An act to authorize the formation of Railroad Corporations,’ passed March 27, 1848. Passed April 11, 1849.” It relates to the statistical returns to be made to the State Engineer annually, and we publish it for the information of all whom it may concern.

The People of the State of New York, represented in Senate and Assembly, do enact as follows:

SECTION 1. The twenty-eighth section of the act entitled “An act to authorize the formation of Railroad Corporations,” passed March 27, 1848, is hereby amended so as to read as follows:—

Sec. 28. Every Railroad Corporation shall make an annual report to the State Engineer and Surveyor, of the operations of the year, ending on the first day of January; which report shall be verified by the oaths of the Treasurer and acting Superintendent of operations, and filed in his office by the twentieth day of January, in each year, and shall state—

1. The length of the road in operation; the length of single track; the length of double track; the time when laid, and the weight of the rail per yard.
2. The capital stock, and the amount called and paid in.
3. The whole cost of the road, showing the amount expended for the purchase of lands, for grading, for expenses of engineering, for bridging, for masonry, for iron for superstructure, for buildings, for engines, for passenger and other cars respectively.
4. The amount and nature of its indebtedness, and the amount due to the corporation.

5. The number of through and way passengers.
6. The rate of fare for passengers, charged for the respective classes.
7. The amount received for the transportation of passengers, of property, of the mails, for interest, and from all other sources respectively.
8. The amount of freight, specifying the quantity in tons, of the products of the forest, of animals, of vegetable food, other agricultural products, manufactures, merchandise, and other articles.
9. The amount paid out for construction, for repairs of roadway, of buildings, of engines, of cars, respectively; and for fuel, for taxes, for engines and firemen, for oil, for train conductors, baggage and brakemen, for State tolls, for interest, for salaries, and to what officers or agents, and the amount paid out for all other purposes incidental to the business of transportation, so as to give a complete statement of the whole annual expenses of the corporation.
10. The number of engine-houses and shops; of engines and cars, and their character.
11. The number of miles run by passenger, freight, and other trains respectively, and the average rate of speed of passage and freight trains, respectively.
12. The number of men employed, and their respective occupations.
13. The amount charged for depreciation of road, engines, cars, &c.; the number and amount of dividends, and when made.
14. The number of persons injured in life or limb, and the cause of the injury, and whether passengers or persons employed.
15. Whether any such accidents have arisen from carelessness or negligence of any person in the employment of the corporation, and whether such person is retained in the service of the corporation.

SEC. 2. It shall be the duty of the State Engineer and Surveyor to arrange the information contained in such reports in a tabular form, and prepare the same, together with the said reports, in a single document, for printing for the use of the Legislature.

SEC. 3. The provisions of this act shall apply to all existing railroad corporations; and the report of said existing railroad corporations, made in pursuance of the provisions of this act, shall be deemed to be a full compliance with any existing law or resolution requiring annual reports to be made by such corporation.

SEC. 4. The provisions of any act inconsistent with this act, are hereby repealed.

SEC. 5. This act shall take effect immediately.

STEAMBOATS REQUIRED TO CARRY LIFE-BOATS, ETC.

The following act, requiring steamboats or vessels propelled or driven by steam to carry small boats for the protection of life in case of accident, passed at the last session of the New York Legislature, takes effect from the first day of June, 1849:—

SECTION 1. Every ferry-boat driven or propelled by fire or steam, navigating any of the waters of this State, shall be provided with at least one small row or life-boat, at least fifteen feet in length, attached to the ferry-boat in such a manner that it can be launched into the water for immediate use in case of need, or in case of accident.

SEC. 2. Every steam vessel, or steamboat, or vessel or boat propelled or driven by steam or fire, navigating any of the waters of this State, of five hundred tons measurement, and carrying passengers, shall be provided with at least one first class life-boat, and one row-boat, twenty-five feet long by seven wide, capable of carrying or supporting fifty persons each, and at least one row-boat of the usual size and construction in addition thereto; and every steamboat or vessel driven or propelled by steam and fire, and navigating any of the waters of this State, of the measurement of two hundred and fifty tons burden, and not exceeding five hundred tons burden, and carrying passengers, shall carry at least two ordinary row-boats, so attached as to be capable of being launched into the water in case of need or accident.

SEC. 3. Every violation of the provisions of this act shall be punishable by fine, not less than two hundred and fifty dollars, which may be sued for and recovered in any court of record in this State; in action against the captain of the boat or vessel, or the owner or owners, or either of them, to be sued for in the name of the treasurer of the county in which either the captain, or the owner or owners, may or shall reside.

SEC. 4. It shall be, and is hereby made the duty of the district attorney of the county in which such captain, owner or owners may or shall reside, to prosecute such suit or complaint, substantiated by the affidavit of the person so complaining, and the

penalties so recovered shall be paid to the county treasurer for the support of the poor of said county.

SEC. 5. None of the provisions of this act shall be construed as in any manner repealing the act entitled "An act requiring compensation for causing death by wrongful act, neglect or default," passed December 18, 1847, or any part of said act.

JOURNAL OF BANKING, CURRENCY, AND FINANCE.

THE BANK OF FRANCE SINCE THE REVOLUTION OF FEBRUARY, 1848.

TRANSLATED FROM THE FRENCH OF HORACE SAY, EXPRESSLY FOR THE MERCHANTS' MAGAZINE AND COMMERCIAL REVIEW.

THE Report of the operations of the Bank of France in the year 1847, presented results of a satisfactory character. A financial crisis, however, had for a long time been apprehended; business had been overdone; capital had been taken up and invested in real estate to too great an extent; government had been allowing the deficit in its supplies to grow greater every day. Under any circumstances the evil would have been a difficult one to master—the Revolution of February was calculated to cause its whole weight to be felt at once.

At Paris, commercial credit rested and depended upon the relations existing between the heavy dealers and bankers and the Bank of France. Unhappily for the whole country, this institution found itself in such a position as to feel at once the recoil of every embarrassment which the Minister of Finance met with in the conduct of public affairs. After succeeding, by means of a sale to the emperor of Russia, in realizing the amount of its resources, the Bank committed the mistake of again investing its capital in public loans. The specie in the vaults represented, for the most part, the balances due depositors on account current, and the real security of its bills was the negotiable paper discounted and entered on the books of the bank.

Its discounted paper was, without doubt, a sufficiently solid basis; only, however, in case credit was maintained, for prompt payments became impossible when business has been extended and expanded during a long period of tranquillity and prosperity. Now, it was precisely this necessity for prompt settlement that the revolution called forth. Business transactions were suddenly arrested; time had to be given to debtors; those who for a long time had found it difficult to meet their engagements, took advantage of the times to relieve themselves of their obligations; more conscientious debtors soon found themselves forced into the same course; and from that time the resources of the bank, paralysed in its hands, ceased to furnish sufficient returns. Every facility of discount continued to be furnished, but the needful aliment of business was wanting.

Meanwhile, their daily necessities compelled business men, little by little, to draw their deposits. On the other hand, apprehension of the public consequence of political events led strangers and many wealthy persons to fly from Paris. They turned their property into money, and carried away or concealed their gold and silver. It was not, therefore, without lively apprehensions that the council of the bank saw its specie every day diminishing.

The symptoms soon became more alarming; the confidence which had been previously felt in the bills of the bank grew weaker; the holders of bills began to besiege the bank for specie; and the moment was rapidly approaching when all the specie would be absorbed. Under circumstances so perilous, the bank would soon be reduced to the necessity either of suspending all operations, with a view to the liquidation of its affairs, or of applying to the government to interfere, and permit a suspension of specie payments until better times.

The first course would have been the signal for general bankruptcy, which could not be thought of without alarm. On the other hand, the Bank of France, through the excellence of its organization, the confidence which the manner in which its affairs were carried on, and the publication of its accounts inspired, was itself in a condition still to render great service to the public finances, as well as to commerce and industry. It was necessary, therefore, at all hazards to save this institution; and if this was to be done, it would not do to wait until its remaining resources were exhausted.

In accordance, therefore, with a detailed report of the governor on the condition of

the bank, the Provisional Government, on the 16th March, 1848, issued a decree to the following effect:—

Art. 1. The bills of the bank shall be received as money.

Art. 2. The bank is relieved from the necessity of specie payments.

The issue of bills was limited, by Art. 3, to 350,000,000 francs in all.

The next article was to the effect that small bills of not less than 100 francs might be issued.

The same provisions were extended to all the branches of the bank.

Finally, a sixth article obliged the bank to make a public statement of its position, in the *Moniteur*, every eight days.

Thus, the bills of the Bank of France became a paper money, with which every debtor could discharge himself from claims against him. The first effect of this measure was naturally a depreciation of the bills, the precious metals became dear, and the loss on bills reached 25 francs on the thousand for silver, and 150 francs on the thousand for gold. The scarcity of specie caused a pressure, which was all the greater because the bills in circulation were of the denomination of 1,000 francs and 500 francs, and the means of making change were wanting. The small bills of 100 francs, promised in the decree, were importunately demanded, and many a malediction was visited upon the delays in their issue.

It became necessary to establish a commission with power, by a suspension of the law, to pay out specie for bills to those who had workmen to pay. In this way the specie in reserve continued to decrease for some time, even after the suspension of the regular specie payments. The decrease was the greater because the Minister of Finance and the Mayor of Paris did not fail to avail themselves of the opportunity to fill their own coffers with specie.

Bank bills thus became a national currency, but had not as yet, however, circulated elsewhere than in Paris and in the fourteen towns in which the Bank of France had branches. In some other towns in the departments local banks had been established, each of which issued bills, which rarely passed beyond the boundary of the district. These banks, of course, experienced the same embarrassments which weighed upon the great central institution at Paris. The aid which had been given to this by means of a decree of suspension could hardly be refused to the others. The bills of the local banks, therefore, obtained a forced circulation throughout the whole of the departments in which they were respectively situated.

For a while the national unity of France, as far as monetary exchanges were concerned, was broken down. He who had been legally paid a debt at Marseilles, was unable to pay his own debt at Montpellier, with the paper money he had received. This state of things could not last, and a law, printed in the *Moniteur* of April 29, put an end to it by decreeing the consolidation of the banks of the departments of Rouen, Marseilles, Toulon, Lyons, Orleans, and Havre with the Bank of France. The capital and specie of these banks were added to the capital and specie of the central institution, and the stockholders became stockholders of the Bank of France, the exchange being made at the rate of 1,000 francs per share. The number of shares was thus increased by the addition of 17,200, to 85,100 at 1,000 francs a share. The amount of issue allowed to the Bank of France was increased by the amount which had been before allowed to the local banks. Temporarily, all the bills were allowed to circulate throughout the country, in order to give the Bank of France time to prepare new bills, with which, within six months, to replace the old. Finally, the old branches and the local banks were obliged to designate themselves as—*Bank of France*—*Branch Office of*—.

The banks of Bordeaux and of Nantes were disposed to resist this measure strenuously. Negotiations ensued, and their incorporation took place a little later.

The old capital of the bank was.....francs	67,900,000
Additional capital of the branches.....	23,350,000
Total new capital.....	91,250,000

Thus the great question, discussed for so many years, whenever the renewal of the charter of a local bank was applied for, was all at once decided, by the mere force of circumstances, in favor of a single institution, with branches at various points of the country. This system has great advantages, as well as serious inconveniences. The greatest danger of a single chartered National Bank is, that its interest becomes too closely allied to those of the government finances. What embarrasses the one, em-

barrasses the other, and they react upon each other. The bank soon becomes the agent for loans, and the abuse of paper money becomes then, as it were, a constant menace suspended over the nation.

The bank, which had already invested in the public funds, first had to make a loan to government of 50,000,000, secured by a deposit of treasury notes. Afterwards, 30,000,000 more were demanded. Then came a contract, ratified by the National Assembly, by which the bank bound itself to furnish 150,000,000 upon certain special securities; that is to say, for 75,000,000, on the security of the income of mortgages, in accordance with the ordinance of 15th June, 1834; in other words, for four-fifths of their value. The other 75,000,000 by a transfer, with power of resale, of a part of the public forests, designated in a table annexed, and containing a superficies of 84,729 hectares, 10 acres.

At the same time the Bank of France was induced to lend the city of Paris the sum of 10,000,000, as an advance upon a new city loan of 25,000,000. And afterwards it consented to a new loan of 6,000,000 to the department of the Seine, to insure the distribution of relief during the winter.

Thus the great establishment of credit, on which depend all commercial transactions in France, became consolidated with the political institutions of the country, and would find its existence threatened by any event which might attack the resources of the State.

In the midst of such dangers its affairs were conducted with such prudence that the credit of this noble institution was sustained; the issues were moderate; the specie in reserve was rapidly restored; and specie payments could have been resumed within six months without inconvenience. Any delay in this respect could only be attributed to the uncertainty of the future.

The last quotation for a share of the bank in February was ..	3,180
On the 7th March, at the reopening of the Board	2,400
10th April, (the lowest point)	950
Quotations rallied 27th December to	1,760

What most contributed to restore confidence was the weekly publication of the condition of the bank.

These statements give the following results with respect to the resources and liabilities of the bank at intervals of six months:—

	France.	Can.
April 20, the specie in the vaults was at the lowest point	51,235,750	58
In the branches	89,473,385	00
Total	88,659,135	58
November 30, the amount of specie at Paris was	135,546,100	73
In the under banks	107,131,535	00
Total	242,677,635	73
Increase from April 20 to November 30	154,018,500	15

COMPARATIVE CONDITION OF THE BANK OF FRANCE ON THE 6TH APRIL AND 27TH OCT., 1848,
AT NIGHT.

	April 6.		RESOURCES. October 28.		Difference.	
	France.	Can.	France.	Can.	France.	Can.
Coin and bullion	53,432,367	50	128,979,222	05	75,546,874	55
Cash in the branches	43,402,580	00	102,083,495	00	58,680,915	00
Notes to be collected	19,805,489	77	963,922	45	18,831,567	32
Discounts at Paris	218,554,999	45	65,852,219	81	152,702,779	64
“ in the branches	57,141,538	46	109,056,388	44	51,914,859	98
Advances on coin and bullion	2,490,900	00	14,170,800	00	11,679,900	00
“ on public secur. of France	12,254,082	90	33,721,746	65	25,827,067	75
Ditto at the branches						
Due from branches for their bills in circulation			4,359,404	00		
Income reserved	15,126,750	00				
“ for disposable funds	10,000,000	00	10,000,000	00		
Office and furniture	11,660,197	89	33,902,413	62	22,241,915	73
Real estate of the branches	4,000,000	00	4,000,000	00		
			2,594,450	00		

	April 6.		RESOURCES. October 26.		Difference. Francs. Cn.
	Francs.	Cn.	Francs.	Cn.	
Interest at the office in Algiers.....	1,000,000	00	.....	.....	
“ “ national office.....	200,000	00	200,000	00	
Paper to be taken up.....	7,143,579	50	14,272,130	82	} 15,445,042 32
“ “ “ by sub-banks.....	.....	.....	8,316,494	00	
Proceeds of the sale to Russia.....	831,191	06	.....	.....	
Expenses of the bank.....	419,572	80	870,721	33	
“ sub-banks.....	.....	.....	292,757	00	
Miscellaneous.....	46,560	08	919,235	11	
Advances to government on treasury drafts of the Republic.....	50,000,000	00	50,000,000	00	
Advances to the government on the 150,000,000 loan.....	.....	.....	25,000,000	00	
Investment by the sub-banks in public securities.....	.....	.....	12,806,741	89	
Loan of 10,000,000 to the city of Paris.....	.....	.....	3,500,090	00	
Interest due the old department banks at the national offices.....	.....	.....	230,000	00	
Treasury drafts.....	.....	.....	7,061,332	50	
Total.....	507,509,808	91	632,583,174	17	

	April 6.		LIABILITIES. October 27.		Difference. Francs. Cn.
	Francs.	Cn.	Francs.	Cn.	
Capital.....	67,900,000	00	67,900,000	00	
Reserve.....	10,000,000	00	10,000,000	00	
Real estate.....	4,000,000	00	4,000,000	00	
Bills in circulation.....	285,595,400	00	353,004,425	00	67,409,025 00
“ “ in the branches... ..	15,126,750	00	43,314,475	00	28,187,725 00
“ “ to order.....	1,980,545	60	486,543	20	1,444,002 40
Account current with treasury credit.....	49,331,669	77	9,970,232	45	39,361,437 32
Various accounts current.....	65,454,515	82	75,810,674	26	10,356,158 44
Paper payable at sight.....	1,776,000	00	2,102,300	00	426,300 00
Rediscounted for the last six months.....	728,692	37	422,932	27	
Dividend payable.....	297,436	25	82,853	25	
Discounts on discount.....	3,021,757	11	1,943,533	28	
Branch of Algiers, 6 months' deposit.....	1,086,203	69	539,699	01	
Drafts of the branches to be paid..	1,065,035	03	5,287,297	10	
Miscellaneous.....	195,803	27	191,993	18	
Capital of the new sub-banks.....	.....	.....	23,350,000	00	
Accounts current at the sub-banks..	.....	.....	24,732,304	00	
Reserve of the new sub-banks.....	.....	.....	2,980,750	14	
Paper payable at the sub-banks....	.....	.....	1,675,501	00	
Drafts of the sub-banks on the bank.	.....	.....	2,015,632	00	
Drafts of the bank on the sub-banks.	.....	.....	2,103,096	00	
Discounts on discount at sub-banks..	.....	.....	641,233	00	
Total.....	507,509,808	91	632,583,174	17	

The specie securities had become three times greater, while the issues, instead of increasing in the same proportion, had actually diminished. At the first period the circulation was as follows:—

In Paris bills.....francs	298,008,300
In bills of the branches.....	15,222,500
Total.....	313,230,800
And on the 30th November—	
In Paris bills.....	289,906,300
In bills of the sub-banks.....	19,811,300
Total.....	309,717,600

The amount of assets gradually diminished, and bankers and merchants proceeded

to liquidate their affairs. It would have been desirable to see a revival of business manifested by the mercantile operations of the bank. It is evident, on the contrary, that the specie in reserve had increased on account of this very liquidation of affairs and general winding up. There being no business transacted on time, less negotiable paper than ordinary went into circulation, and there were fewer applications for discounts.

Thus, the books of the bank exhibited a diminution of resources. In average times it should exhibit commercial liabilities to the amount of \$50,000,000. The amount on the 6th April was—

At Paris.....francs	218,554,999 45
In the branches.....	57,141,588 46
Total.....	275,696,587 91
On the 30th November the amount on the books fell to.....	64,871,522 69
In the sub-banks it was.....	108,950,602 67
Total.....	173,822,125 86

The sub-banks, more numerous than the old branches, naturally present a higher figure, but the books at Paris exhibit a falling off of three-fourths. The Bank of France thus became provisionally, during the crisis, simply a loan and credit agent of the Minister of Finances, lending him paper money, which the government backed by its decrees. Thus far, it must be confessed, the management has kept within prudent bounds. No serious injury has been done to the solidity of the institution. Let confidence be restored, let business revive, and it will yet be able to render eminent service. Hereafter, when prosperous days shall have returned, it will be time to discuss all the questions touching the freedom of banks.

RESPONSIBILITIES OF BANK STOCKHOLDERS, ETC.

We publish below a law of "the People of the State of New York, represented in Senate and Assembly," passed April the 5th, 1849:—

AN ACT TO ENFORCE THE RESPONSIBILITY OF STOCKHOLDERS IN CERTAIN BANKING CORPORATIONS AND ASSOCIATIONS, AS PRESCRIBED BY THE CONSTITUTION, AND TO PROVIDE FOR THE PROMPT PAYMENT OF DEMANDS AGAINST SUCH CORPORATIONS AND ASSOCIATIONS.

SECTION 1. Whenever default shall be made in the payment of any debt or liability, contracted after the first day of January, one thousand eight hundred and fifty, by any corporation or joint stock association for banking purposes, issuing bank notes or any kind of paper credits to circulate as money, after the first day of January, one thousand eight hundred and fifty, the stockholders of such corporation or association shall be individually responsible, equally and rateably, such responsibility to be enforced as hereafter provided, and in no other manner, for the amount of such debt or liability, with interest to the extent of their respective shares of stock in any such corporation or association, as hereinafter provided.

SEC. 2. The term "stockholder," as used in this act, shall apply not only to such persons as appear by the books of the corporation or association to be such, but also to every equitable owner of stock, although the same may appear on such books in the name of another person; and also to every person who shall have advanced the instalments or purchase money of any stock in the name of any person under twenty-one years of age, and while such person remains a minor, to the extent of such advance; and also to every guardian or other trustee who shall voluntarily invest any trust funds in such stock; and no trust funds in the hands of such guardian or trustee shall be in any way liable under the provisions of this act, by reason of any such investment, nor shall the person for whose benefit any such investment may be made, be responsible in respect to such stock, until thirty days after the time when such persons, respectively, become competent and able to control and dispose of the same; but the guardian, or other trustee making such investment as aforesaid, shall continue responsible as a stockholder until such responsibility devolves upon the person beneficially interested therein; and in respect to stock held by a guardian or other trustee, under a transfer of the same by a third person, or under positive directions by a third person for such investment, the person making such transfer, or giving such directions,

and his executors and administrators, shall, for the purposes of this act, be deemed a stockholder, and the estate of such person, if he be deceased, shall be responsible for the debts and liabilities chargeable on such stock according to the provisions of this act.

SEC. 3. The persons who shall be stockholders of any corporation or association described in the first section of this act, at the time of contracting any debt or liability by such corporation or association, shall be responsible therefor, as declared in the said first section, but shall be exonerated from such responsibility in respect to any stock which shall have been transferred previous to any default in the payment of such debt or liability, on the books of such corporation or association, to any resident of this State, of full age, in good faith and without any intent to evade such responsibility; and every assignee of any stock so transferred previous to such default, shall be responsible for debts and liabilities to the extent of such stock, in the same manner as if he had been the owner at the time of contracting such debt or liability, with the same exception in his favor, in respect to any stock transferred by him as herein provided; and the same rule of responsibility shall apply to each subsequent assignee.

SEC. 4. A book shall be provided and kept by every corporation or association described in the first section of this act, in which shall be entered the names and residences of the stockholders in such corporation or association on the first day of January, one thousand eight hundred and fifty, and the names and residences of the original stockholders of every corporation or association organized after the day last mentioned, so far as the same are known to the officers of the bank; the number of shares held by each stockholder; every registered transfer of stock upon the books of the bank after the said last mentioned day; the names of the assignor and assignee, with their residences and the number of shares transferred. The said book shall be, at all times during the usual hours of transacting business, open to public inspection. A neglect to provide and keep such book, ready for examination as herein provided, shall subject the corporation or association, whose duty it is to provide and keep the same, to a penalty of one hundred dollars for every day's neglect. And a refusal by any officer of such corporation or association to exhibit such book to any person demanding the inspection thereof, as herein provided, shall subject such officer to a penalty of fifty dollars. The said penalties may be sued for and recovered with costs by any person who will prosecute for the same; the one moiety thereof to be paid to such person, and the other moiety to be paid into the treasury of this State. In all proceedings under the provisions of this act, the said book shall be presumptive evidence of the truth of the contents thereof; but such presumption may be repelled by evidence by any party or person interested in repelling the same.

SEC. 5. After the expiration of twenty days from the service of any summons and complaint, or declaration, or proceeding for the recovery of any demand against any corporation or association described in the first section of this act, upon any debt or liability exceeding one hundred dollars contracted after the first day of January next, in which the precise sum demanded shall be stated, the plaintiff shall be entitled to enter an order or rule for judgment, upon filing such complaint, or other proceeding, with due proof of personal service thereof upon any officer of such corporation or association, and judgment shall be rendered thereon for such demand, with interest and costs, whether an answer to such complaint or other proceeding has been served or not, unless an order shall have been filed in the office of the clerk where such judgment might be entered, granted by a justice of the Supreme Court or county judge, that the entry of such judgment be stayed until the issue joined, or to be joined by the parties, be disposed of. But no such order shall be granted without proof by affidavit to the satisfaction of such judge that the defendant in such suit has a good defense on the merits to such demand or some part thereof arising upon facts set forth in such affidavits.

SEC. 6. Upon the return of an execution against the property of any corporation or association described in the first section of this act, unsatisfied in whole or in part, or upon proof satisfactory to any justice of the Supreme Court, that any such execution, although not returned, cannot be satisfied out of any property of the defendant, he shall at once make an order declaring the insolvency of such corporation or association.

SEC. 7. Any creditor of any such corporation or association having a demand exceeding one hundred dollars, arising upon a debt or liability contracted after the first day of January next, the payment of which shall have been refused by such corporation or association, may, at any time after ten days from the time of such refusal, apply to a justice of the Supreme Court for an order declaring such corporation or association

insolvent, and for an injunction as hereinafter provided. If, in the opinion of such judge, upon the facts presented, it be expedient in order to prevent fraud or injustice, he may grant an order for a temporary injunction, restraining such corporation or association, and its officers, from paying out, or in any way transferring or delivering to any person, any money or assets of such corporation or association, or incurring any debt or obligation, until such order be vacated or modified.

SEC. 8. Upon a hearing of the parties on such short notice as the judge shall appoint, he shall determine whether such corporation or association be clearly solvent or otherwise, and may require the officers thereof to exhibit any and all of its books, papers, accounts, assets, and effects, and to be examined on oath touching the same, before him, or a referee to be appointed by him. If he determine that such corporation or association is clearly solvent, he shall notwithstanding continue the order for a temporary injunction, if one has been granted, until the demand of the applicant be fully paid with his costs on such application, unless it shall have appeared by affidavit or otherwise that such corporation or association have a good defense on the merits to such demand.

SEC. 9. If the judge determine that such corporation or association is not clearly solvent, he shall make an order declaring the same insolvent, and shall also by order restrain such corporation or association and its officers from exercising any of its corporate rights, or any rights or privileges granted to it by law, and from collecting or receiving any debts or demands, and for paying out or in any way transferring or delivering to any person any of its property, money or effects, until such order be vacated; and he shall immediately appoint a receiver of the property of such corporation or association.

SEC. 10. Any one or more stockholders of any such corporation or association owning stock to the amount of one-tenth part of the capital thereof paid in, may at any time in like manner apply to any justice of the Supreme Court for an order declaring such corporation or association insolvent, or in imminent danger of insolvency. And if, on the facts verified by affidavit presented, such justice shall deem it necessary or expedient, in order to prevent fraud, undue preference or injustice to creditors, he may grant an order in the nature of a temporary injunction, as specified in the seventh section of this act; upon a hearing of the parties as soon as may be practicable, he may require the exhibition to him, or to a referee to be appointed by him, of all the books, papers, accounts, assets, and effects of such corporation or association; and an examination of the officers, servants, and agents thereof, under oath; and if he determine that such corporation or association is not clearly solvent, or that it is in imminent danger of insolvency, he shall make an order declaring such determination, and shall by order restrain the said corporation or association and its officers, in the same manner as provided in the ninth section of this act, and shall also appoint a receiver of the property of such corporation or association.

SEC. 11. Every receiver appointed according to this act, after giving security, shall take into his possession all the property, effects, books, papers, accounts, and demands of such corporation or association, including the securities, if any, which may have been deposited with the Controller, belonging to such corporation or association. He shall immediately give notice, by publication in such newspapers as the Controller or any justice of the Supreme Court shall direct, requiring the creditors of such corporation or association to exhibit and establish their demands before him within thirty days from the time of his appointment. Such receiver shall possess all the powers of receivers of corporations under the third article of title four of chapter eight, and part third of the Revised Statutes, in respect to the settlement of all demands exhibited to them, and in all other respects except as herein otherwise provided; and all such powers now conferred by law on trustees of insolvent debtors as may be applicable, and shall be subject to all the duties and obligations by law imposed on receivers of corporations except as herein modified.

SEC. 12. Under the direction of the Controller, all securities deposited with him belonging to such corporation or association, shall be converted into cash by the receiver, with the least possible delay, and the receiver shall also convert into cash the effects and demands of such corporation or association, and for that purpose may sell at auction any of the said demands which any justice of the Supreme Court shall authorize to be sold; and within ninety days from the time of his appointment, unless such time be enlarged by a justice of the Supreme Court, which may be done for a period not exceeding ninety days, such receiver shall declare a dividend of the cash in his hands among the creditors of such corporation or association.

SEC. 13. Before making such dividend, the receiver shall deduct and retain the sums necessary to defray the expenses of the proceedings, and all sums which he may have paid in order to exonerate any property of such corporation or association from any pledge for specific lien or levy, under execution or attachment. He shall then apply the money in his hands to the payment of the bills or notes held by bill holders of such corporation or association, who shall have presented the same, in just and equal proportions. If any surplus remain, he shall divide and pay the same to and among the creditors of such corporation or association having demands founded on any debt or liability contracted after the first day of January, one thousand eight hundred and fifty, whose demands shall have been ascertained, in proportion to their respective demands; and if any further surplus remain, he shall divide and pay the same to and among all other creditors of the said corporation or association whose demands shall have been ascertained, in proportion to their demands respectively. Such payments to creditors shall be made in the order prescribed by law, in respect to the duties of receivers of corporations.

SEC. 14. If there shall remain unsatisfied any debts or liabilities of such corporation or association, contracted after the first day of January, one thousand eight hundred and fifty, the receiver shall, within thirty days after the declaration of the said first dividend, and without waiting for the actual payment of the sums divided, render to a justice of the Supreme Court residing in the district where the business of such corporation or association was conducted, a particular account of the said debts and liabilities so remaining unsatisfied, and a preliminary account of all his proceedings, under oath, in which shall be set forth the amount of cash realized by him, the expenses and allowances claimed by him, all payments that he may have made, the amount on hand to be divided, and the dividends declared by him.

SEC. 15. The said receiver shall at the same time report and submit to such justice a true and accurate list and statement of the persons who, since the first day of January, one thousand eight hundred and fifty, were stockholders of such corporation or association, the nominal amount of stock held by each, and the residence of each stockholder, so far as the same can be ascertained. The said list and statement shall be made up from the stock books, ledger and list of stockholders kept by such corporation or association, and shall show when each stockholder acquired and transferred the stock standing in his name.

SEC. 16. The said justice shall thereupon refer the said report and list of stockholders to a referee, to be appointed by him, with directions, after giving notice to all persons concerned, to apportion the debts and liabilities of such corporation or association contracted after the first day of January, one thousand eight hundred and fifty, and remaining unsatisfied, among the said stockholders, ratably in proportion to their stock according to the principles in this act declared, and to report his proceedings to such justice, or some other justice of the Supreme Court in the same district.

SEC. 17. The said referee shall cause notice of his appointment, and the time and place of hearing on the matters so referred to him, to be given to each stockholder whose name appears on the said list, at least ten days before such time, which notice shall be served on such of the said stockholders as may then reside in the county where the principal office or place for conducting the business of such corporation or association was situated, either personally or by leaving a copy thereof at the residence of such stockholder, with some person of suitable age, and such notice may be served upon all other stockholders, by publishing the same in one advertisement, containing the names of all such last mentioned stockholders, for at least three weeks, in such newspapers as any justice of the Supreme Court may direct, and the same shall always be published in the paper designated by law for the publication of legal notices, and in a paper, if there be one, printed in the county where the chief office for conducting the business of such corporation or association was located.

SEC. 18. On such hearing, the said referee shall hear the allegations and proofs of all parties and persons interested in the matter referred, and particularly shall ascertain the persons who are chargeable as stockholders for the debts and liabilities contracted as aforesaid, and the amount chargeable to each, according to the rules and principles declared in this act. At the first special term of the Supreme Court held in the county in which such receiver resides, or in an adjoining county, after the expiration of six weeks from the time of his appointment, such referee shall report to the justice holding such term, the apportionment of the debts and liabilities among the stockholders, made by him in detail, with the proofs taken by him on such hearing. If, in the opinion of such justice, further time is requisite to enable the said referee to

complete the apportionment directed, or to take further proof in reference to the same, he may grant such further time, not exceeding ninety days.

Sec. 19. On the final completion of such apportionment, the same shall be reported at a special term of the Supreme Court, as hereinbefore directed, and on the coming in of any such report, the justice holding such term shall proceed to examine the same, and hear the allegations of the parties and persons interested, and may modify or amend the same, or may refer the same back to the same or another referee for further proof or examination, or may confirm the same. If there be a further reference, notice of hearing thereon may be given by a general notice published in the same newspapers in which the first notice appeared for two weeks, and a report shall be made thereon within the time, to be specified in the order of reference.

Sec. 20. When the report of a referee, made according to the preceding sections of this act, shall have been confirmed by a justice of the Supreme Court at any special term thereof, after being modified or amended by him, the same, together with the order of confirmation, shall be filed in the office of the clerk of such county as shall be directed by such justice; and unless an appeal be allowed and entered therefrom as hereinafter provided, the said order of confirmation shall be final as a judgment against each stockholder for the amount charged against him; and one or more executions thereupon may be issued against any one or more of the stockholders named in such report or order for the sum or sums chargeable against him or them, in the same manner and with the like effect as upon a judgment in the Supreme Court, at the instance of the receiver of such corporation or association, and the money collected on such executions shall be paid to and received by such receiver.

Sec. 21. The money so collected, after deducting all expenses of proceedings, shall be without delay divided, distributed, and paid over to the creditors of such corporation or association, in the same manner as hereinbefore provided, in relation to the first dividend, by the said receiver.

Sec. 22. The justice to whom any report by a receiver or by a referee shall be made, as herein provided, shall ascertain and allow the necessary expenses attending the execution of their duties, including the hire of such and so many clerks and such professional assistance as may appear to have been useful to expedite the business committed to them, and shall allow to them such reasonable compensation for their services, not exceeding the rate of five dollars actually employed, as he shall deem proper, which allowances and expenses shall be deducted and defrayed out of the cash in the hands of the receiver before making dividends thereof.

Sec. 23. Neither the dividends herein directed to be made, nor the apportionment of the debts of such corporation or association among the stockholders thereof, shall be delayed or suspended by reason of the pendency of any litigation or controversy for the recovery of any demand by or against such corporation or association, unless the same shall be expressly directed by a justice of the Supreme Court, residing in the district where the business of such corporation or association was conducted, and such delay shall in no case exceed one year; and if, at the time of declaring any dividend, there shall be any prosecution pending in which any demand against such corporation or association may be established, the receiver may retain in his hands the proportion which would belong to such demand and the necessary costs and expenses of the suit or proceeding, to be applied according to the event of such prosecution, or to be distributed in some future dividend to creditors, or among the stockholders.

Sec. 24. If, after paying and discharging the debts and liabilities of such corporation or association, as herein provided, and defraying all the expenses of the proceedings, there shall remain or come to the hands of the receiver any other assets or effects of such corporation or association, the same shall be converted into cash, as hereinbefore directed, and shall be paid to the stockholders upon whom any such debts or liabilities were apportioned in just and equal proportion to the sums contributed and paid by them.

Sec. 25. No appeal from any determination or order of a justice of the Supreme Court, made pursuant to the fifth, sixth, seventh, eighth, and ninth sections of this act, shall suspend or delay the execution of such order or the effect of such determination, unless there be filed, with the notice of the appeal to the clerk of the court, a certificate of a justice of the Supreme Court to the effect that there is probable error in such order or determination, nor unless security be given satisfactory to such justice for the payment of the demand upon which the proceedings in those sections may be founded, whenever judgment shall be rendered therefor, with interest at the rate of ten per cent and costs.

SEC. 26. No appeal from any order or determination, made pursuant to the tenth section of this act, shall suspend or delay the execution of such order or the effect of such determination, unless there be filed, together with the notice of appeal to the clerk of the court, a certificate in all respects corresponding with that required in the last preceding section, nor unless security be given satisfactory to the justice granting such certificate to indemnify the stockholders upon whose application such order or determination was made, against all damages, costs, expenses, and losses by reason of any debt or liability of such corporation or association created after the first day of January, one thousand eight hundred and fifty.

SEC. 27. No appeal can be made from any order of any justice of the Supreme Court under this act referring any matter to a referee.

SEC. 28. An appeal from the determination of a justice of the Supreme Court confirming the apportionment of the debts and liabilities of a corporation or association among the stockholders thereof, as provided by this act, may be taken by the receiver of such corporation or association, or by any one or more of the stockholders affected by such apportionment, in the same manner and with the like security as provided by law in the case of appeals from the special term of the Supreme Court to a general term, or from the judgment of such general term to the Court of Appeals, in the same manner and with the like security and effect as appeals to the same court from any other like judgment, except that it shall not be necessary for a receiver so applying to give any security for costs or otherwise.

SEC. 29. If any such determination or judgment shall be reversed or modified, so that a new apportionment of such debts and liabilities shall become necessary, the court in which such reversal or modification shall be made shall direct a new apportionment, and the matter shall be remitted to the proper justice of the Supreme Court for that purpose; and the same proceedings shall be had thereon to complete such new apportionment as are herein provided in relation to the original apportionment.

SEC. 30. Every security taken under the provisions of this act shall be filed with such clerk of the Supreme Court as the justice taking the same shall direct, and the same may be enforced by suit in the name and for the benefit of any person for whose benefit or indemnity the same was taken.

SEC. 31. Any creditor of any such corporation or association who shall have neglected to present his demand to the receiver before the first or subsequent dividend, and who shall present the same before the second or any other subsequent dividend, shall receive the sum he would have been entitled to on any former dividend, before any distribution be made to other creditors.

SEC. 32. Every issue of fact or of law joined in any suit against any corporation or association, described in the first section of this act, upon any debt or liability contracted after the first day of January, one thousand eight hundred and fifty, or against any receiver of such corporation or association, or by any such receiver under the provisions of this act, shall have preference at the court at which it shall be noticed for trial or argument to all other causes; and every case made, special verdict rendered, bill of exceptions and demurrer to evidence taken on such trial, and every issue of law joined on the pleadings in any such suit, and every appeal from any order or determination, judgment or decree made or rendered under the provisions of this act, and every special motion relating to any proceedings had under this act, shall have a preference in the hearing and argument thereof in any court where the same may be pending.

State of New York, Secretary's office.

I have compared the preceding with the original law on file in this office, and do certify that the same is a correct transcript therefrom and of the whole of the said original.

CHRISTOPHER MORGAN, Sec'y of State.

USURY: OR, FREE TRADE IN MONEY.

[FROM THE BOSTON CHRONOTYPE.]

We thank God that there are some indications that the Massachusetts Legislature may have the wisdom to strike out of the statute book that relic of the dark ages, the usury law. We think the day is coming when a rich man will be ashamed to take more than one per cent for his money. But it cannot be hastened by usury laws. There is no reason why people should be denied the right of trading as they please

with their money, rather than with their horses or cattle. Nothing is gained for the poor by usury laws, but much lost. Like all unnatural restrictions on trade, they create a rank crop of dishonesty.

Usury in money is only one of the many modes by which the rich overreach the poor. The whole of trade, as at present managed, is of a piece. Restricting its freedom only increases its iniquity. The remedy is not in the power of law. It is only in the power of moral and spiritual training. When the great mass of the community can come to that degree of intelligence and magnanimity which will provide that all laborers shall have such a wherewith and a whereon to work as not to be at the mercy of capitalists, and when, to do this, property shall be equitably taxed, that is, at a higher and higher per centage, according to its degree of accumulation, then justice will have so taken root in the community that neither money nor bread and butter will be reckoned the chief end of life. Then a rich man in investing his money will not think of the profits as the chief thing or any great thing, but the question will be, What investment will produce most happiness, most gratitude, most permanent good to the greatest number? There will then be no need of a law forbidding a ruinous rate of interest, for capitalists will feel that their end is lost if their money do not benefit the borrowers as well as themselves. Does this suppose the abolition of selfishness? Not at all. Men will still love themselves, and for this very reason will lend their money at an equitable rate. The reason why capitalists now so much sacrifice every other consideration to the per centage of profit, is that the possession of money gives social elevation and influence beyond any other possession. An enlightened public sentiment will change that. In fact it is rapidly giving way—the prestige of mere wealth. Look at Prince Esterhazy, Sir Robert Peel, Lord Ashley, Lord Morpeth, Gerrit Smith, and many other rich men whom we could name, who are finding profitable investments for their wealth at low interests or none at all. The great consideration of mere money rests upon the ignorance of the masses. The moment when the philosophy of finance—of how fortunes are made, is thoroughly understood by the people, it will cost too much to make them. Apply this on a small scale and see if it be not true. Shut up a score of well read political economists on an island and see if any one of them will dare to overreach the rest by trade. The cure for usury is like that of rumselling—moral suasion, light, mental elevation. All that law can do, in either case, is to settle the damages out of the accumulations arising from these not wholly unlike trades.

THE PENNSYLVANIA LAW OF PROMISSORY NOTES, ETC.

The following five sections constitute part of a law passed by the Legislature of Pennsylvania on the 5th of April, 1848, "in reference to Promissory Notes, Counterfeit Endorsements," &c. We have the assurance of A. L. Russel, the Secretary of State of Pennsylvania, that each section has been correctly copied from the original bill, as now in force.

SECTION 7. That from and after the passage of this act, in all cases where suit is brought in any of the Courts of this Commonwealth, upon or for the recovery of the amount due on any Promissory Note, Post Note, Note of Hand, Due Bill, Bill of Exchange, Draft, Order, Check, or other instrument of writing in the nature thereof, no plea shall be held to be available, and no defense shall be made or taken by the defendant or defendants for want of proper and timely demand of payment or acceptance, or proper and timely protest for, and notice of non-acceptance or non-payment of the same, unless the respective places where such demand is to be made, and where such notice is to be served or given, or the names and residences, or places of business of the respective parties thereto, shall be legibly and distinctly set forth thereon.

SEC. 8. That when such places of demand and notice, or such names, residences, or places of business are omitted to be set forth as aforesaid, demand of acceptance, as well as protest for, and notice of non-acceptance, may be made and given at any time before maturity of such instrument or instruments as require acceptance, and demand of payment, as well as protest for, and notice of non-payment of the same, at any time after maturity thereof, and before suit is brought thereon.

SEC. 9. That in all such cases of omission as aforesaid, Promissory Notes, Post Notes, Notes of Hand, Due Bills, and such like instruments, shall be held to be payable and protestable at the place where they are dated, and if they contain no place of date, then at the place where they are deposited or held for collection; and Bills of Ex-

change, Drafts, Orders, Checks, or other instruments or securities in the nature thereof shall be held to be acceptable, payable, and protestable at the place where the same shall, or may be addressed to the drawer or drawees.

SEC. 10. That whenever any value or amount shall be received as a consideration in the sale, assignment, transfer, or negotiation, or in payment of any Bill of Exchange, Drafts, Orders, Checks, Promissory Note, or other instrument negotiable within this Commonwealth by the holder thereof from the endorsee or endorsees, or prayer or prayers of the same, and the signature or signatures of any person or persons represented to be parties thereto, whether as drawer, acceptor, or endorser, shall have been forged thereon, and such value or amount, by reason thereof, erroneously given or paid, such endorsee or endorsees, as well as such prayer or prayers respectively, shall be legally entitled to recover back from the person or persons previously holding or negotiating the same, the value or amount so as aforesaid given or paid by such endorsee or endorsees, or prayer or prayers respectively to such person or persons, together with lawful interest thereon, from the time that demand shall have been made for repayment of the same.

SEC. 11. That all Bills of Exchange, Drafts, Orders, Checks, Promissory Notes, or other instruments in the form, nature, or similitude thereof, that shall or may hereafter be made, or be drawn or endorsed to order within this Commonwealth, upon any person or persons, body politic or corporate, co-partnership, firm or institution of or in, or that shall be made payable in any other State, territory, county, or place whatsoever, for any sum or sums of money, with the current rate of exchange in Philadelphia, or such other place within this Commonwealth where the same may bear date, or in current funds, or such like qualification superadded, shall be held to be negotiable by endorsement, and recoverable by the endorsee or endorsees in his, her, or their own name or names, in the same manner, to all intents and purposes, as bills of exchange and promissory notes formally drawn and ordinarily in use and negotiable within this Commonwealth, are now by law recoverable therein.

COMPOUND INTEREST TABLE.

FREEMAN HUNT, Esq., *Editor Merchants' Magazine.*

DEAR SIR:—Having had occasion, in writing up long and complicated accounts, to compound interest upon each item, and finding the usual process tedious, and liable to many little mistakes, I set about contriving a method of lessening the labor, and thereby diminishing the chances of error. The result I have worked out into a table, by means of which compound interest may be calculated, for any number of years not exceeding ten, by a single operation. The table is arranged for every rate per cent from three to eight. Perhaps the same thing has been done already; but, if so, I have never seen it.

The rate being at the top of the column, and the time at the left side, *multiply the principal by the figures under the rate and opposite the time*, and the product will be the whole amount of compounded interest for that time.

For a period over ten years, ascertain the amount for ten years, add it to the principal, and the sum becomes a new principal, on which to proceed as before for the number of years over ten. The fractional parts of a year must be done by the usual method.

Yours, respectfully,

W. CUTTER.

TABLE OF COMPOUNDED INTEREST ON \$100, FROM TWO TO TEN YEARS, AND FROM THREE TO EIGHT PER CENT.

Time.	3 per cent.	4 per cent.	5 per cent.	6 per cent.	7 per cent.	8 per cent.
2 years.....	6.09	8.16	10.25	12.36	14.49	16.64
3 ".....	9.27	12.49	15.76	19.10	22.50	25.97
4 ".....	12.55	16.99	21.55	26.25	31.08	36.05
5 ".....	15.93	21.67	27.63	33.82	40.25	46.93
6 ".....	19.41	26.53	34.01	41.85	50.07	58.69
7 ".....	22.99	31.59	40.71	50.36	60.57	71.38
8 ".....	26.68	36.86	47.75	59.38	71.82	85.09
9 ".....	30.48	42.33	55.13	68.95	83.85	99.90
10 ".....	34.39	48.03	62.89	79.08	96.71	115.89

BANKS OF NEW ORLEANS.

STATEMENT OF THE CONDITION OF THE BANKS OF NEW ORLEANS FOR THE MONTH OF APRIL.

The Board of Currency publish the following report of the movement of the banks of New Orleans, which exhibits the banking institutions in that city in a strong position. For the month past collectively, an increase of specie of \$227,222, and increase of deposits of \$655,599, an increase of distant exchange, or exchange operations, of \$537,453; a decrease in circulation of \$53,616, a decrease in distant balances of \$205,843, and a decrease in local discounts of \$371,656. The City Bank appears to be generally reducing its business, preparatory to a final dissolution of its charter.

CASH, OR IMMEDIATE LIABILITIES.

	Circulation.	Deposits.	Due distant banks.	Other cash liabilities.
Bank of Louisiana.....	\$1,592,327	\$2,686,002	\$494,556	\$7,775
Canal and Banking Company...	1,614,835	1,874,974	100,157	731
City Bank.....	509,040	974,769	492,252	15,310
Louisiana State Bank.....	611,190	1,478,970	.....	3,957
Mechanics and Traders' Bank....	884,165	2,179,005	220,015	11,083
Total.....	\$5,211,557	\$9,143,720	\$1,306,980	\$38,806

CASH, OR IMMEDIATE ASSETS.

	Specie.	Bills receivable.	Due Foreign banks.	Other cash assets.
Bank of Louisiana.....	\$2,144,780	\$2,002,313	\$2,242,679	.....
Canal and Banking Company...	1,571,583	1,690,986	1,757,596	\$50,578
City Bank.....	926,776	1,689,510	46,833	\$32,400
Louisiana State Bank.....	965,096	2,944,084	.....	.....
Mechanics and Traders' Bank....	1,472,460	1,446,623	1,313,380	1,094
Total.....	\$7,080,685	\$8,773,516	\$5,360,488	\$384,072

THE PAWNROKERS AND THE SAVINGS BANKS.

The following paragraph, which we copy from the *New York Evening Mirror*, contains a good suggestion, which we hope will soon be adopted:—

There are now in this city some twenty or thirty pawnbroker establishments, which pay, we believe, a sum for a license, and which secures fortunes to some very respectable members of the Jewish persuasion. We do not find fault with these last for their prosperity, but we find fault with that apathy, on the part of the public, which allows money to be made from that portion of the commonwealth which can least afford to pay extravagant interest for the use of money. Who are those who may be seen every night stealing with conscious misery timidly into those stores on Chatham-street, over which the three gold balls hang mysteriously, yet full of meaning! The poorest of the poor, the wife of the mechanic out of work with his unused tools; the child of the widow bringing a faded shawl, the decent covering exchanged for the necessary food; perhaps the wife of the inebriate parting with the ring that connected her for life with misery, in order to stifle the cravings of an appetite that becomes, ungratified, madness. None but these deal with the pawnbrokers, (except, indeed, the thief,) the neediest of the needy, the wretchedest of the wretched. How much does the State allow these poor creatures to be fleeced of in interest! Twenty-five per cent, and a forfeiture after one year. That law which prohibits the capitalist from loaning his money at more than 7 per cent, permits this enormous usury when the poorer classes are concerned. Now there are many men in this city who are sincere philanthropists, who give their time to, and expend their money for, those of their fellow beings less fortunate than themselves. Why not increase the power of the poor to help themselves! Of all charities those are the best that help by teaching—that relieve the distress and point out the means of preventing its occurrence. The savings bank and the pawnbroker's establishment could be conjoined. Thus, the poor man who saves from daily labor a few dollars, will have the satisfaction not merely of laying up the basis of a property for himself, but also of contributing to alleviate the sufferings of a fellow laborer. The savings of honest industry would thus be twice blest. Such a savings would be very popular; the difference between interest upon the loans at seven per cent and the deposits at five per cent will pay the expenses of such an institution, which would prove a double blessing.

THE STOCK EXCHANGE BROKERS.

The *Day Book* gives the following lively sketch of the mode of doing business at the Stock Exchange, in Wall-street, New York, and as it contains some information that will be new to many of the readers of the *Merchants' Magazine*, we have concluded to transfer it to our pages:—

The character of the operations in Wall-street are little known by the generality of people, and it may be interesting to many readers of the *Day Book* to learn how bargains are made among stock-brokers. The question is often asked by those who do not understand the signs and language of Wall-street, what *b3*, *b30*, *s60*, *snwk*, and *opg*, means.

Every trade has its own peculiarities and its own dialect. Stage drivers and hostlers have a language of their own. Hod-carriers and masons always speak understandingly to each other, if not to strangers. Thieves and gamblers have their own phrases, and house-breakers their signs; all of which are as unintelligible to the uninitiated as so much Greek. Dry goods dealers and grocers have a language of their own. In speaking of the standing of a countryman, they often say he is good; they have *sold him*, or are going to *sell him*; which means, not that they have sold the man for a price, but that they have trusted him with a certain amount of dry goods. They are never heard to say they have *bought* him. So at auction sales they have their signs. If they want to bid two dollars a dozen for a box of gloves, or two dollars a piece for a box of ribbons, they hold up two fingers. (And if a dry goods merchant is in an omnibus and wants the driver to take pay for one, when he hands up a quarter he will hold up one finger to him; while a lawyer or mechanic will bawl out *one*—take out *one*, *onx*, *ONE*.) Grocers talk about things being heavy, hard, quick, slow and easy. Thus feathers may be heavy, cotton down, pork slow, beef quick, &c.

Brokers have, like all others, a language of their own. "*b3*" means that the buyer has the privilege of taking the stock any time within three days; "*b30*" within thirty days. If, for instance, A. buys a hundred shares of Canton of B, *b30*, he can call upon B. to-morrow, or next day, or next week, or whenever he chooses, for the stock, and B. must deliver it. "*S30*" means that the seller has the privilege of delivering it any time he chooses within the thirty days. The seller is always entitled to interest on stocks sold on time. "*Thwk*" means this week; "*nwk*" next week; "*opg*" opening of the transfer books, which are closed for the time to make dividends.

The manner of doing business at the board is as singular and unique as can be imagined. The stock is not put up by an auctioneer and bid upon, as many suppose. Every man is his own auctioneer and own bidder. From fifty to one hundred brokers assemble in a large room, around two or three rows of semi-circular tables; the President of the Board, with a secretary or scribe, takes his seat in a chair upon a platform, or what is called, in a court-room, the judge's bench, and commences calling off the different kind of stocks. When he comes to a stock that any one wants to buy or sell, they make their offers, and the following is a pretty fair specimen of the jargon that is heard after the bill is opened.

President—"Harlem Railroad." 1st broker—"I'll give fifty-six for a hundred, buyer 30;" 2d broker—"Fifty-six, buyer 20;" 3d broker—"55½, seller 10;" 4th broker—"I'll sell 'em, 56, seller 10, 5 up;" (which means that 5 per cent must be deposited on the contract if the offer is accepted.) By this time they are all at it, and the room is a perfect Babel. "I'll give 56 cash, for a hundred," cries one; "sold," rings out above the noise of all. "A hundred more," cries the buyer; "sold." "A hundred more;" "sold." "I'll take a hundred—sell 'em, seller ten—withdraw." Those ten words mean that he will buy a hundred shares of Harlem Railroad stock at 56 per cent, for cash, or that he will sell a hundred shares with the privilege of delivering them within ten days, and that a minute after, as no one has taken either of his offers, he withdraws them both. If some one had said "sold" to his first offer, or "take 'em" to his second, the contract would have been completed; and if he had lost a hundred or a thousand dollars, he would no more think of backing out or flying from his offer, than if there had been a contract written out and sealed and signed by both parties.

The reader has but to imagine a hundred men in a room together, all halloing "I will sell a hundred, buyer 10;" "I will sell 50, seller 30;" "I will give 57, buyer 30;" "I will give 57, buyer 10;" "I'll give it cash." "I'll give it, seller 3;" "I sell 'em, seller 80;" "Sold;" "take 'em"—to know what a Babel the stock exchange is. It is

not an uncommon thing for a broker to buy a hundred shares of stock at 58, cash, and sell them at 58, seller 3, and have both offers on the floor at once. A keener set of men does not exist than the stock-brokers. One must have his eyes, ears and mouth open, if he does business at the Board, and a right-down sharp fellow will hear every offer, and *catch 'em*, too.

As a body, the brokers are honorable men. When they make a bargain they will "stand to it." You need have no fears of their backing out because they can do better. If you should meet a broker to-day, and he should carelessly, even, say "I will sell a hundred shares of Canton at 37, buyer 10 days," and you should say, "I'll take 'em," and pass on, and not see him again until the ten days were up, and then call on him for the stock, he would give it to you if he had to buy it, and give a thousand dollars more than he sold it for. If he come into your office, or meets you in the street and offers you "25 for 500 shares of Long Island," and you say *sold*, and a minute after some one offers him 500 shares for 24, he would not notice him, but stick to his first bargain. And he expects the same thing from those he deals with. He despises one who will back out because he is likely to lose, and will never trust him after it.

Much has been said and written against brokers, but they are about the only class of men that will not back out of a bad bargain. If they make an offer, they consider it binding until they say "withdraw." If it is accepted before that, they are stuck, and make the best of it. There is nothing *very* commendable in this, for it is only doing what is right and honorable; but it is so unlike other trades that it is worth noticing. Up-town builders, mechanics, lawyers and merchants, who take so much pleasure in cursing and traducing brokers, would do well to take lessons of these very brokers in honor and honesty.

COMMERCIAL REGULATIONS.

THE CANADIAN TARIFF OF 1849.

THE following is the Tariff, as agreed to in Committee of the Whole on the 17th of April, 1849, and concurred in by the House on the 18th of April. For this document we are indebted to the editor of the *Montreal Herald*, who informs us that, although it contains some verbal errors or omissions, yet, for all practical purposes, this copy will be found to be correct:—

Sugar, refined or candy, the cwt.....	£0	14	0
“ and further for every £100 value.....	12	10	0
“ other kinds, the cwt.....	0	9	0
“ and further for every £100 value.....	12	10	0
Molasses, the cwt.....	0	3	0
“ and further for every £100 value.....	12	10	0
Tea, the lb.....	0	0	1
“ and further for every £100 value.....	12	10	0
Coffee, raw or green, the cwt.....	0	4	8
“ and further for every £100 value.....	12	10	0
“ other kinds, the cwt.....	0	14	0
“ and further for every £100 value.....	12	10	0
Tobacco, manufactured, the lb.....	0	0	1
“ and further for every £100 value.....	12	10	0
“ unmanufactured, the lb.....	0	0	0½
“ and further for every £100 value.....	12	10	0
“ cigars, the lb.....	0	1	6
“ and further for every £100 value.....	12	10	0
“ snuff, the lb.....	0	0	4
“ and further for every £100 value.....	12	10	0
Wine, in wood, value £15 the pipe or under, the gallon.....	0	0	6
“ and further for every £100 value.....	25	0	0
“ in wood, value over £15 the pipe, the gallon.....	0	1	6
“ and further for every £100 value.....	25	0	0
“ in bottles, the gallon.....	0	4	0
“ and further for every £100 value.....	25	0	0

Spirits and strong waters, of all sorts, for every gallon of any strength not exceeding the strength of proof by Syke's Hydrometer, and so in proportion for any greater strength of proof, and for any greater or less quantity than a gallon :—

Whiskey, the gallon.....	£0	0	3
“ and further for every £100 value.....	12	10	0
Rum, the gallon.....	0	1	3
“ and further for every £100 value.....	25	0	0
Animals of all kinds, hams, meats of all kinds, except mess pork, butter cheese, flour, barley, buckwheat, bere and bigg, oats, rye, peas, beans, meal, and wheat, not bolted, bran, shorts, and hops, for £100 value..	20	0	0
Geneva, brandy, and other spirits or strong waters, except rum and whiskey, the gallon.....	0	2	0
And further for every £100 value.....	25	0	0
Spirits, cordials, and liquors, sweetened or mixed with any article so that the strength cannot be ascertained by Syke's Hydrometer, the gallon.	0	3	0
And further for every £100 value.....	25	0	0
Salt, the bushel.....	0	0	1
“ and further for every £100 value.....	12	10	0
Spices and fruits, nuts, macaroni, and vermicelli, sweetmeats or fruit pre- served in sugar, candy, or molasses, for every £100 value.....	30	0	0
All goods, wares, and merchandise, not otherwise charged with duty, and not hereinafter declared to be exempt from duty, for every £100 value	12	10	0

The following are exempt from duty, that is to say :—

Anatomical preparations, ashes, pot and pearl, and soda, philosophical instruments and apparatus, printed books, (not foreign reprints of British copyright works,) maps, busts and casts of marble, bronze, alabaster, or plaster of Paris, paintings, drawings, engravings, etchings, and lithographs, cabinets of coins, medals, or gems, and other collections of antiquities, specimens of natural history, mineralogy, or botany, trees, shrubs, bulbs and roots, wheat and Indian corn, and animals imported to improve stock.

Models of machinery and other inventions, and improvements in the arts.

Coin and bullion.

Anchor, ashes, bark, berries, nuts, vegetables, woods and drugs used solely in dyeing, and indigo, bristles, burr-stones, unwrought, chain cables, coal and coke, cotton-wool, grease and scraps, hemp, junk or oakum, lard, lead, pig and sheet, marble in blocks unpolished, oil, cocoanut and palm only, ores of all kinds of metals, railroad bars, bars and rod iron, nails, sheet and hoop iron for manufacturing cut nails, spikes, rods, pig, scrap, old iron, rosin, saw-logs, ships' water casks in use, teazles, tarred rope, tallow, tar and pitch, type-metal in blocks or pigs, wheat and Indian corn, wool, for £100 value..... £2 10 0

Manures of all kinds.

Arms, clothing, provisions and stores of every description, which any commissary or commissaries, contractor or contractors shall import or bring into the province for the use of Her Majesty's army or navy, or for the use of the Indian nations in this province, provided the duty otherwise payable thereon would be defrayed or borne by the Treasury of the United Kingdom or of this province.

Horses and carriages of travelers, and horses, cattle, and carriages and other vehicles, when employed in carrying merchandise, together with the necessary harness and tackle, so long as the same shall be *bona fide* in use for that purpose, except the horses, cattle, carriages, vehicles and harness of persons hawking goods, wares, and merchandise through the province for the purpose of retailing the same, and the horses, cattle, carriages, and harness of any circus or equestrian troop for exhibition: the horses, cattle, carriages, and harness of any menagerie to be free.

Donations of clothing specially imported for the use of, or to be distributed gratuitously by, any charitable society in this province.

Seeds of all kinds, farming utensils and implements of husbandry.

The following articles in the occupation or employment of persons coming into the province for the purpose of actually settling therein, viz :—

Wearing apparel in actual use, and other personal effects not merchandise; horses and cattle; implements and tools of trade of handicraftsmen.

The personal household effects, not merchandise, of inhabitants of this province, being subjects of Her Majesty, and dying abroad.

And the following articles when imported directly from the United Kingdom, or from any of the British North American provinces, and being the growth, produce, or manufacture of the said United Kingdom or of the said provinces, viz:—

Animals, beef, pork, biscuit, bread, butter, cocoa paste, corn or grain of all kinds, flour, fish, fresh or salted, dried or pickled, fish oil, furs or skins, the produce of fish or creatures living in the seas, gypsum, horns, meat, poultry, plants, shrubs and trees, potatoes and vegetables of all kinds, seeds of all kinds, skins, pelts, furs or tails undressed, wood, namely, boards, planks, staves, timber, and firewood.

The following articles are prohibited to be imported into this province, that is to say: Books and drawings of an immoral or indecent character.

Coin, base or counterfeit.

It is also determined, for the protection of the fair trader and of the revenue, to provide against the fraudulent undervaluation of goods subject to *ad valorem* duty, by the appointment of competent appraisers, by giving to such appraisers, and to the collectors, the power to examine witnesses upon oath, by requiring the production of duly attested invoices, by the forfeiture of goods with regard to which such fraud may be committed, by the proper examination of the goods, and by adopting such other precautions as may be requisite to prevent or punish such fraud; and to make such other amendments to the Customs' Act as experience hath shewn to be requisite for better attaining the objects thereof.

The Governor in Council is to have the power, in certain contingencies, to increase the rates of duty by 10 per cent.*

MEXICAN TARIFF.

The *National Intelligencer* has received from the Mexican Minister residing at Washington the following decree, which it translates for the benefit of our provision producers:—

“DEPARTMENT OF THE TREASURY.

“His Excellency, the President, has been pleased to direct to me the following decree:—

“The President of the United Mexican States to the inhabitants of the Republic: Know ye that the General Congress has decreed as hereinafter:—

“Art. 1. Is permitted for the term of three years the introduction into the port of Matamoros and the custom-houses of the frontier of the State of Tamaulipas of the following articles, namely, flour, rice, sugar of every description, coffee, small grains” (*semillas*, which applies to such, except wheat and barley,) “of every sort known by the name of *menestros*, butter, pork, salted or pickled. All these will, for their entire import duty, pay the rates subjoined:—

Common wheat flour, the bbl.....	\$1 00
Superfine “ “	1 50
Rice, per 100 lbs.....	0 75
Sugar, “	1 00
Coffee, “	1 10
Salt pork, “	1 20
Butter, “	1 20

Small grain, by measurement, 20 per cent.

“Art. 2. Is likewise permitted the introduction at the custom-house of Paso del Norte, in the State of Chihuahua, of wood and lumber for buildings, subject, however, to the registration provided by the tariff for other articles generally.

“Art. 3. The government, in order truly to accomplish the object of this decree, will previously ascertain whether there exists on the frontiers the scarcity of those provisions which it is intended hereby to introduce; and it will put an end to that introduction so soon as the population now favored shall have been supplied by the national commerce with the needful articles.

“Art. 4. Are comprehended within the benefits of this law 1,125 barrels of flour and 150 quintals (cwt.) of rice, introduced through Matamoros in the month of January last.

“ARRANGOIZ.”

“MEXICO, April 4, 1849.”

* This contingency will arise in case the Provincial Treasury is subjected to any loss under the resolutions to encourage railways. The increase, if any, will be on the duties; thus, 10 per cent. will be raised to 11 per cent, not to 20 per cent.

NAUTICAL INTELLIGENCE.

LIGHT DUES IN SPANISH PORTS.

THE *Madrid Gazette* of the 15th April has published the following royal decree, dated 11th of the same month, regulating the future payment of Light Dues in the Spanish ports:—

Article 1. In place of the variable charges at present recovered in the ports of the Peninsula and the adjacent islands, under the denomination of Light-house and Harbor Light Dues, for the future one general Light Duty will be demanded at all ports having a Custom-house, payable at the same time as the other Navigation charges; agreeably to the regulations contained in the following articles:—

Article 2. Spanish merchant vessels proceeding from national possessions beyond sea, or from foreign ports, to pay 1 rial per ton.

Article 3. Foreign merchant vessels proceeding from the same, will pay 2 rials per ton; her Majesty's government reserving the power of altering this rate according to the amount of dues paid by Spanish ships in foreign ports.

Article 4. To be exempted from this duty:—

1st. Spanish ships returning from the same countries in ballast.

2d. Those of all flags which enter Spanish ports and sail therefrom in ballast.

3d. Those which enter the same through stress of weather, whenever these do not discharge or take in cargo at the said ports. Should the latter be done, then the integral duty must be paid; the vessels so paying thereby becoming exempt from a renewal of the same charges in the other ports to which they may be ultimately bound with part of their cargo. This rule will be equally observed with respect to the ships, which, without being forced by stress of weather, should enter two or more ports to discharge the goods contained in their manifests.

Article 5. National vessels engaged in the coasting trade will pay for each voyage, going or coming, half a rial per ton. To be exempted:—

1st. Vessels not measuring more than 20 tons.

2d. Those of larger measurement which do not make a voyage of more than 20 maritime leagues.

3d. The latter are exempted from the said charges, when touching at intermediate ports, before arriving at their destination, whatever may be the distance of the latter from the place where their manifests were originally issued.

4th. Those returning in ballast from the ports to which they may have been bound.

Article 6th and last. The Light Duty to be considered as a temporary measure, and will be reduced to an amount sufficient to provide for the expenses of conservation and service, after covering the cost of establishment.

LIFE SAVING BENEVOLENT ASSOCIATION.

This Company was chartered by the Legislature of New York at its late session, on the application of a number of individuals, for the humane purpose of saving the lives of shipwrecked mariners and passengers from vessels stranded on the coast of Long Island; and by donations in money, medals, or diplomas, to reward meritorious conduct and acts of courage in the preservation of human life.

The Company contemplate the erection of boat-houses upon the most dangerous parts of the shores and beaches of Long Island, and to place in them life-boats, carronades, and rockets, life-preservers, India rubber dresses, and other materials suitable to afford facilities in saving life from shipwrecked or distressed vessels.

The Company held its first meeting in May, and the following officers were chosen:—

Walter R. Jones, *President*; Bache McEvers, *Vice-President*; Robert C. Goodhue, *Treasurer*; John D. Jones, *Secretary*.

The Managers of the Association are Walter R. Jones, Bache McEvers, Josiah L. Hale, George Griswold, Daniel Lord, Anthony B. Neilson, Charles H. Marshall, Moses H. Grinnell, William S. Wetmore, Thomas Tileston, Henry Coit, Augustin Averill, Joseph Walker, Lambert Suydam, Henry Chauncey, John C. Green, Robert Kermit, John L. Aspinwall, Edwin Bartlett, A. A. Low, Solomon T. Nicoll, Walter R. Jones, Jr., Robert C. Goodhue, Edward K. Collins, Oliver Slate, Jr., John D. Jones, Mortimer Livingston, Frederick A. Delano, Theodore Dehon, the Collector of the Port of New York, *ex officio*, and the President of the Chamber of Commerce, *ex officio*.

PILOTS AND PILOT BOATS.

TRINITY HOUSE, London, February 6th, 1849.

Notice is hereby given, that on and after the night of the 1st March next, all Pilot boats in the service of the Pilots licensed by this Corporation, will be distinguished in the manner hereinafter described, viz:—

Pilot boats in the service of the said Pilots, at the several ports in the English Channel, on the East Coast of England, and in the river Thames, by a Green Light at the mast head, and in addition thereto, by a Flare-up Light, shown at intervals of 15 minutes.

Pilot boats in the service of the said Pilots, at the several ports in the Bristol and St. George's Channels, by a White Light at the mast head, and a Flare-up Light at intervals of 15 minutes.

By order,

J. HERBERT, Secretary.

BILLS OF LADING FOR ST. JOHN'S, ETC.

Masters of vessels trading at St. John's and Newfoundland, will save much trouble and expense by being particular to have Bills of Lading properly signed and worded, "all cargo or freight to be delivered from the vessel's tackles, and not accountable for weight." If attention is not paid to the signing, they will be subjected to the expense of sending the goods to the consignee's door, or to transfer the vessel from one wharf to another, which was the case with myself.

JOSHUA F. ORAM.

Master of Brig Osprey, of Baltimore.

JOURNAL OF MINING AND MANUFACTURES.

THE GOLD MINES, OR DEPOSITS OF SIBERIA.

THE following paper respecting the gold mines of Siberia, their discovery and administration, from the pen of JOHN L. HAYES, Esq., of the Katahdin Iron Works, Maine, communicated by the writer to the *Washington Globe*, will be read with interest at the present time:—

At a time when the recent wonderful discoveries in California are attracting universal attention, a notice of the gold deposits of Siberia, which, from their recent discovery, great richness, and distance from the seats of civilization, offer obvious points of comparison with our own El Dorado, would seem to possess unusual interest.

The materials for the notice of the auriferous alluvions of Siberia, which I propose now to give, have been principally compiled from the invaluable repertory of metallurgical knowledge, the *Annales des Mines*, and particularly from an article extracted from the *Gazette du Commerce*, of St. Petersburg, inserted in the volume of the *Annales* for 1843.

For some years previous to 1828, the attention of the Russian Government and private adventurers was devoted to working the auriferous alluvions of the western flanks of the Oural Mountains. The works of this district made rapid progress, and establishments for washing the gold were successively organized among the mountains lying further towards the north. But it was generally considered that there was no hope of finding gold in Siberia, or the vast country on the other side of the Oural Mountains; and the directors of the principal mines of that country gave the sanction of their authority to these views. Notwithstanding this, two enterprising merchants, named Popoff and Resanoff, determined to explore the slopes of the *contreforts* of the Oural chain, which extend their ramifications into Tobolsk. In 1829 they discovered some indications of auriferous deposits, at the foot of the Altai Mountains, in the government of Tomak; but the product of the washings was so small as to confirm the idea of the unproductiveness of the sands of Siberia.

In 1830, a distinguished engineer of mines having been made governor of Tomak, the auriferous sands of this part of the empire were methodically explored by officers who had obtained experience in the Urals, and a deposit quite rich in gold was discovered. This discovery entirely changed the ideas which had been entertained respecting the wealth of the soil of Siberia, and encouraged many private adventur-

ers to commence explorations for gold. In 1831, Popoff found in the valleys of the affluents of the Kiy many beds of auriferous sands, but only of moderate richness. In 1831, Rezanoff discovered upon the borders of the Kondoustouyoule a very rich deposit, which is yet celebrated for its productiveness. Under this point the labors of the adventurer were concentrated for several years. In 1836, researches were extended towards the east, in the southern part of Yenisseisk. There, in a country bristling with rocks, and almost inaccessible, a series of exceedingly rich deposits were discovered upon the shores of the Birouzka.

But the treasures of this rich basin were not sufficient for the activity of the explorers, whose numbers constantly increased. In 1839, Rezanoff, with many others, penetrated the northern country, to the vast regions watered by the rivers Upper, Lower, and Rocky Tougouska. In 1841, between the last two rivers, they found a great number of beds of auriferous sands, remarkable both for their extent and richness, and which, in the immensity of treasures which they contained, surpassed all others before discovered.

We have no detailed account of researches since 1842; but at that period explorers were pushing still further north and east, and the reports which we have of the enormous increase of the products of the auriferous sands of Russia in 1846, show that the explorations were crowned with success.

It is a matter of scientific interest, and it may be a matter of practical importance, as indicating the proper districts for research in California, to notice the nature of the mountains among which the principal auriferous deposits in Siberia have been found.

The middle of Siberia is furrowed by an almost uninterrupted series of imposing chains of mountains, dependent upon those of Central Asia, and designated successively, from east to west, under the name of the Altai, Sayane, Duourie, &c. The important beds of auriferous sands have never been found upon the declivities of the principal chains. Even in the high mountains, which have been explored with the most care, as in the district of the mines of Kolyvan, which abound in copper and silver, no auriferous beds have been found excepting some which were too poor to be washed with profit. All the beds of auriferous sands important for their extent or richness, as yet discovered in Siberia, have been found upon the declivities of the *contreforts* of the principal ranges, or the lesser hills, which descend in numerous ramifications from the principal ranges. The deposits containing the gold are found scattered between the summits of the different systems of lesser mountains, and in the valleys which are sometimes parallel to the direction of the chain, or transversal to them. They are more often found upon the borders or in the beds of streams of water, or in marshes. Auriferous deposits are never found upon the crests of the lesser heights; and if they are discovered on the declivities, it is always at the foot.

The beds of auriferous sands repose in part upon the underlying rock, sometimes separated from it by a bed of earth composed of gravel and rounded stones, or a fat clay. In the gravel are found fragments of rock of the nature of the formations which compose the surrounding heights—a proof that the sands have not been formed far from the localities where they are now found.

The mountains are composed principally of phyllade, (a foliated or alaty rock,) chloritic and talcose slates, alternating with a calcareous rock without petrifications. These rocks are pierced by veins of quartz and protruded masses of diorite. The presence of the latter, an igneous rock, appears to indicate the points near which the gold may be found. It would occupy too much time to give a detailed enumeration of the different auriferous beds which are worked in Siberia. One of the most celebrated deposits is one called Vosakrenessky, in the basin of the Kiy, owned by the merchants Paladine and Rezanoff—the latter one of the first adventurers. The bed, for several years, produced 5 *solotniks* for 100 *poods*, or one part of gold of seventy-eight thousandths of sand. A deposit which contains 1½ *solotniks* to 100 *poods*, is worked with great profit. This immense bed, whose thickness is at no point less than five English feet, and in many places twenty-seven feet, lies at a depth of over thirty feet under sedimentary beds, in such a manner that the working cannot be carried on under the open sky, and the bed is consequently worked by subterranean galleries. This deposit, in 1842, had produced 330 *poods*, equal to 14,520 pounds Troy, of gold. The bed called *Spusky*, upon the borders of the Great Pekin, which throws into the Oudeira, one of the latest discovered, is yet more remarkable. The yield of this bed for one year has been 9 *solotniks* for 100 *poods*, or one part of gold in 48,000 of sand; and it has yielded in that time 4,400 pounds Troy of gold. Although there are doubtless beds which, having a large extent, contain, upon the whole, greater riches, this deposit

by its relative richness, the quantity of metal which it contains, and the facility with which it is worked, is the most productive in Siberia. It belongs to a single individual, a merchant named Miasnikoff, who has, by his good fortune and enterprise, in a short time become one of the wealthiest men in Russia.

It is interesting to see how insignificant the first attempts at working the sands of Siberia were, and how rapid the progress of the works has been. The following, in round numbers, are the products of several years after the first explorations; one pood being equal to 43½ lbs. Troy:—

In 1830	5 poods.	In 1834	65 poods.	In 1837	132 poods.	In 1840	255 poods.
1831	10 "	1835	93 "	1838	193 "	1841	358 "
1832	21 "	1836	105 "	1839	183 "	1842	631 "
1833	36 "						

In the year 1842 the auriferous deposits of the Oural Mountains produced 310 poods. The whole product in Russia, in Siberia, and the Ourala, for that year, was 40,557 lbs. Troy. The production, since that period, increased in nearly the same ratio. Leplay, Professor of Metallurgy at the School of Mines in Paris, estimates, from reliable sources, that the value of gold produced in Russia, from the auriferous sands, in 1846, would be equal to ninety millions of francs, which would make the weight of the metal equal to 78,000 pounds Troy, (thirty-nine tons.) He states that at that time many of the alluvions, worked with profit, contained only one part of gold in two millions of earthy materials worked. Residues, worked at a former period, have been reworked, which contained only one part in four millions. Some idea may be formed of the labor required to produce this immense mass of treasure, when it is understood that the workings of that single year would cause the extraction, manipulation, and transportation of over fifty million tons of materials, which is more than the total weight of all the materials extracted and elaborated by the collieries and iron establishments in Great Britain. The increase of the gold workings in Siberia has demanded so much iron for tools, steam engines, &c., as to have had an important effect upon the exportation of Russian iron. More extraordinary single masses of gold have been found in the Oural Mountains than in Siberia. The largest mass (pepite) of gold in the world was discovered at Minsk in 1842. It was found in a bed of auriferous sands, at a depth of about twelve feet from the surface of the soil, under the foundations of the establishment for washing. Its weight was 36,020 kilograms—over ninety-six lbs. Troy. Near this, forty-two masses were found, weighing from one to seven lbs. according to Humboldt. The largest pepite of gold before known was found in Anson county, North Carolina; the weight was about fifty-eight pounds.

Before concluding this notice I must glance at the administrative dispositions which are made for watching and regulating the labors of the adventurers in the gold districts of Siberia.

An individual who wishes to explore the mountains of Siberia must have a license to that effect from the ministry of finances. After he has found a deposit—and it may be remarked that many search in vain and lose all the expenses of their explorations—a tract of land called a parcel is conceded to him by the government. It is provided that a parcel shall not exceed certain limits, and that the same individual shall not possess two contiguous parcels. The duty claimed by the government is from 15 to 35 per cent, according to the richness of the deposit, and the explorers are bound to pay four rubles for one pound of gold extracted, for the expense of a surveillance of the mines. Officers are appointed to lay out the parcels, and to see that all the gold obtained is registered in books provided for that purpose. The gold is first sent to the administration of the mines of Altai. After having been first assayed there, it is sent under charge of officers to the mint of St. Petersburg. There, a definite assay is made, which fixes the first value of the gold, and the duty which the government shall retain. This, with the expense of coinage, is deducted, and the remainder sent to the proprietor in pieces of five gold rubles.

The washing of the gold is effected upon inclined planes of different constructions, which are set in movement by horses, hydraulic wheels, or steam power. The machines and processes have been carried to a high degree of perfection, as may be seen by the small per centage of gold in sands which are now worked with profit. The laborers belong principally to the class of convicts; but as the country is traversed by detachments of Cossacks, and all the laborers are under the surveillance of officers of the government, perfect order and system prevail in the establishments.

The importance of this enterprise to Russia is incalculable. Developing national

industry in a desolate country which would otherwise have been almost unknown and wholly unimproved, and creating an immense capital, which, taking another direction, is enjoyed and improved throughout the whole empire, perpetually supplying a currency, and filling the treasury of the empire without impoverishing its subjects, it has been to Russia one of the greatest sources of its national prosperity, and has tendered materially to the permanence of the most powerful empire on the continent of Europe, while so many other governments have tottered and fallen around it.

The view of this great enterprise which we have now taken is peculiarly interesting to us, when a similar and almost parallel enterprise is presented to us on the shores of the Pacific. It shows us, if Siberia can be any example, that the sands of California are not to be exhausted in a few months, but that a field for systematic and well organized labor is there opened whose products may be doubled for years to come. It has been said that he who finds a mine finds a workshop; the history of the Siberian mines shows that the richest deposits of gold are no exception to this rule, which should not be forgotten by the California adventurer. It is singular that such wonderful natural resources should, about the same time, be opened to two people of different races, and occupying the extremes of geographical position and political relations. The influence of our race and institutions will be seen in the improvement which we shall make of these resources.

ADIRONDAC STEEL WORKS.

JAMES T. HODGE, Esq., one of the editors of the *American Railroad Journal*, furnishes the following account of the Adirondac Steel Works, which we consider of sufficient interest to transfer to the pages of the *Merchants' Magazine*:—

Through the kindness of our friend, David Henderson, Esq., agent for the above works in Jersey City, we have been favored with an opportunity of examining them the present week; and as they are the only works in the United States which have successfully persevered in the manufacture of cast steel, and will consequently have the honor of establishing this highly important branch of manufacture in this country, a short account of the works, we think, will be received with no little interest by many of our readers.

For several years, the Adirondac Iron Company have been contending with extraordinary perseverance in attempts to reduce with economy the very refractory ores found in enormous quantities on their lands in the northern part of Essex county, in the State of New York. These ores will be particularly described in the papers on the Iron Manufacture of the United States. At present the company have a furnace in operation fifty miles back from Lake Champlain, which makes with great difficulty from $1\frac{1}{2}$ to 3 tons of pig iron a day. This is puddled and made into bar iron on the spot, then transported to Jersey City to be converted into steel. The ores are magnetic iron ores, and charged with titanium, and prove to be well adapted for the manufacture of a superior quality of steel.

The first experiments made with reference to this object were by Joseph Dixon, Esq., of Jersey City, well known for his original genius in the mechanic arts, as well as for his familiarity with the sciences. His blow-pots, or black lead crucibles, manufactured in Jersey City, we believe are unsurpassed for their refractory qualities by any other whatever. We have had occasion to prove them in severe tests in anthracite furnaces. In one of these pots he once melted over 20 lbs. of the bar iron made from the Adirondac ores. Experimenting upon the ores and the iron, he succeeded in making some cast steel of good quality and great hardness. From his success, he was engaged by the Adirondac Company to build furnaces on a considerable scale in Jersey City, to submit the matter to a thorough trial. This he undertook on a plan of his own, intending to use anthracite, never before applied to this manufacture; and this in the face of all the failures previously made in this country, as well as the prevalent impressions derived from the English manufactures, that the experience of successive generations of workmen is requisite for success in this difficult art. Without experience of his own, and without workmen who had ever seen the process of making cast steel, Mr. Dixon commenced the works last summer. They went into operation early the present year, and for some months have been going on with complete success.

They consist of a cementing furnace, built of small size, as experimental merely, into which eleven tons of bar iron are charged every two weeks, and taken out converted into blistered steel. This furnace has been at work nearly a year, and a con-

siderable quantity of blistered steel is already on hand. This steel is broken up into small pieces, and put into blow-pots which hold 40 lbs., or into larger ones holding 60 lbs. These, to the number of sixteen, are placed in as many little furnaces, whose tops are on a level with the ground, and around which circulates the air before being blown in at the tweres. In two hours the contents are melted, and the steel is poured or "teemed" into the ingot molds, which are three, and some four inches square. The ingots are then re-heated in small reverberatory and hollow fires, and drawn out under hammers weighing from 125 to 600 lbs., and running at the rate of from 150 to 350 strokes a minute. In this way they are finished into bars of all shapes and sizes. The present production is about 2,500 lbs. a day. In this process, the iron bars gain in the converting furnace of carbon absorbed, about 4 per cent in weight. In melting, the loss is about half a pound to a pot of 40 lbs.; and in the re-heating and hammering, the loss is from 6 to 8 per cent.

The quality of the steel has been thoroughly tested for many purposes, and no instance of failure is known. It is in demand by those who have been induced to try its qualities, and is now purchased by them in preference to the best English cast steel. The highest testimonials are given by the proprietors of the Novelty Works, of New York city, by Messrs. E. P. Richards and Richardson, of Utica, also by many others.

A small bar was lately sold to Mr. Quillett, of New Brunswick, New Jersey. He returned with a coil of spring for clocks and watches which he had manufactured from it, which weighed nine pounds. It had been rolled out quite thin to a width of 2½ inches, and was in one piece of several hundred feet in length, making a coil of about 9 inches diameter. On the edges it was perfectly free from all irregularities, as smooth almost as a finished spring. Mr. Quillett said he could easily have rolled a piece out to the length of 1,400 feet.

It is not at all surprising that this steel should be pronounced superior to the best English steel we get, but it is surprising that, with the great variety of magnetic ores we possess, we should not have made such steel for ourselves long ago. In the Transactions of the Institution of Civil Engineers of London, it was shown in the year 1842, that of the 25,000 tons of steel made annually in Great Britain, not more than 2,500 were made from the best quality of Swedish iron; the rest was made from inferior charcoal iron from Russia and Germany, and from English iron, which was not well calculated for converting. With ores such as are found in many of our States, no doubt equal to the best Swedish for this purpose, and with a sufficiency of them at the lowest prices, to insure against inferior mixtures, it is to be hoped this successful experiment of Mr. Dixon and the Adirondac Steel Company will so encourage this new branch of manufacture, that we shall soon be independent of foreign supplies of this important article.

NATIVE COPPER IN AMERICA.

"At a recent meeting of the Academy of Science, M. Cordier exhibited a mass of native copper, from the banks of Lake Superior, in the United States of America, and communicated on this subject the following particulars:—Some time since, beds of native copper, of considerable extent, were discovered on the eastern banks of Lake Superior. More than 120 companies are at present occupied in working these valuable beds, which are extremely remarkable in many respects. The copper is always found in its native state, and is disseminated in pieces of various sizes and irregular form, through a vast extent of pyroxenic porphyry, passing to the state of brown wacke, often amygdaloid, and which completely resembles the pyrogenous rocks in the neighborhood of Oberstein, in the Palatinat. The metallic particles are found sometimes as forming part of the rock, and at other times they occupy irregular veins, formed of white and spathose carbonate of lime.

"A specimen exhibited to the academy by M. Cordier weighed upwards of 112 lbs., and contained very little gangue. This specimen, as well as another more than ten times its weight, formed part of a cargo of several tons which recently arrived at Havre; it is intended to be placed in the Museum of Natural History. The copper is of extraordinary tenacity and purity, containing scarcely ten parts in a thousand of sulphur and silver. At one of the extremities of the copper district, where this metal is somewhat less abundant, it is replaced by native silver, disseminated in some parts throughout the rock, and also in the copper, in particles extremely fine, generally not readily to be perceived, and rarely attaining the size of a centimetre (0.393 inch.) The association of these two metals in a native state, is a circumstance entirely new. From the

information communicated to M. Cordier, a copper is obtained by smelting, often containing 20 per cent of silver. M. Cordier has seen an ingot sent for assay, which was found to contain more than 80 per cent of silver. If, as it would appear probable, these discoveries should lead to extinguish workings, the United States of America, which already possess rich mines of iron and anthracite in the old territory of the Union, and who will derive advantage from the working of the lead mines of the Upper Mississippi, and of the almost incredible 'diggings' in California, will be placed at the head of those nations which Nature has most favored in the distribution of subterranean wealth."

The *American Mining Journal and Railroad Gazette* copies the above paragraphs from the *London Mining Journal* of March 8d, 1849, and appends the following remarks:—

"The copper referred to was part of a shipment made by the Copper Falls Mining Company last fall to a house in Havre for sale. Specimens of the shipment were forwarded by this house to the School of Mines at Paris for analysis, that its value might be determined upon. There are some inaccuracies in the statement of M. Cordier as above reported. There are but few companies now actively employed in the Lake Superior country mining for copper; not exceeding ten or twelve in number. A great many paper companies were originally formed, and locations made by them, but beyond speculating in their stock, most of them have never done anything. It is a mistake that the copper is found only in detached fragments or irregular veins. It always occurs in regular veins, and the separate fragments or masses that are sometimes met with, are only boulders that have been washed from these veins. The silver which is referred to was not found in separate veins from the copper, but in the same. The whole shipment made both of copper and argentiferous rock, was from the same vein. This argentiferous rock was mostly found near the junction of trap and sandstone. We learn that the Copper Falls Mining Company have received letters from their agent at Havre, giving similar statements as to the value of the mineral shipped, upon the analysis had with those above.

GOLD IN THE INTERIOR OF AFRICA.

We learn from St. Petersburg that about the time of the discovery of the gold treasures of California, other traces of that precious metal have been found in the interior of Africa. Colonel Kavelowsk, of St. Petersburg, who has for a long time superintended the operations of the vast mines of Siberia, and who is now engaged in making a mineralogical survey in the interior of Africa, has met with several large hills of auriferous sand on the right banks of the Sonat River, about a day's journey from Cassen. He has, by the assistance of the natives, washed these sands, which operation has led him to the conclusion that more gold is therein contained than in those of Siberia.

The Colonel, in consequence of this valuable discovery, has pursued his operations further, and on a careful examination of the banks of the Ramla, the Dya, Goncha, Benisch, Angol, and the Gamanil, has found it to exist in much more considerable quantities.

He has sent to Russia for a number of miners and gold washers, with the object of examining the country in these parts more minutely, and carrying on his operations of gold washing on a more extensive scale.

THE POTSDAM SANDSTONE.

J. Finch, in describing the Geology and Mineralogy of St. Lawrence counties, in the nineteenth volume of Silliman's Journal, says that the road between the villages of Heuvel and De Peyster passes over this formation—the Potsdam Sandstone—but such is its extreme hardness, that the wheels of the carriages have not made the slightest impression. If portions of this rock sufficiently large could be transported to a distance, and deposited in places where railroads were required, it would completely answer the purpose, with the advantage that the carriages need not be confined to any particular track. This rock is abundant at Whitehall, at the head of Lake Champlain, and elsewhere on the shores of the Lake. It can be procured in large alabs, which might answer an excellent purpose for the paving of crowded thoroughfares.

MINERAL WEALTH OF RUSSIA.

We learn from Wilmer & Smith's *Liverpool Times*, that the metallic produce of the Russian empire, in 1848 was, according to official documents, as follows:—viz., 1,826 poods of gold, $\frac{1}{2}$ pood of platinum, 1,192 poods of silver, 254,569 poods of copper, and 8,518,678 poods of wrought iron. The pood is equivalent to a little more than 36 lbs. avoirdupois. The gold from Russia therefore represents a value of £3,944,832, (or £ 98,120,800,) making due allowances for the English alloy. The silver, at 5s. 6d. the ounce, represents a value of \$188,000.

MERCANTILE MISCELLANIES.

THE NEW YORK CHAMBER OF COMMERCE.

THE annual meeting of this Association, one of the oldest in the country, being instituted, as we learn from the historical sketch of Charles King, Esq., in 1768, took place on the 1st of May, 1849. After the admission of several members, proposed at the preceding monthly meeting, the President, the Hon. JAMES G. KING, announced the next business in order—the election of officers.

Before proceeding to this, Mr. King desired, in repeating his deep-felt obligations to the Chamber for the honor they had done him in electing him heretofore to the Presidency, to renew the notice given by him at the last meeting, that he declined to be again a candidate. He could not, however, take leave of the station he held through the kindness of his associates of the Chamber, without expressing the high estimation which he placed upon that election, and his earnest hope that it would always be occupied by gentlemen who could appreciate its dignity and usefulness.

Over and above the honor of presiding over the Chamber of Commerce, a body comprising so much of the intelligence, enterprise, respectability, and wealth of the mercantile profession, there was an *ex officio* trust committed to the President, which imposed important duties—that of Trustee of the Sailor's Snug Harbor, one of the most munificent and truly benevolent charities ever devised. By the will of the liberal founder, Captain Randall, the President of the Chamber was to be one of the Trustees of the Fund, and Mr. K. was glad of the opportunity of saying that, heretofore, the President, whoever he might be, of the Chamber, had faithfully and diligently attended to their trusts. It was altogether fitting that an asylum for the relief and support of aged seamen, no longer capable of earning their own living, should be supervised in part by the gentlemen whom the associated merchants of New York promoted to be the chief of their Association or Chamber, and the good example given in that respect by all past Presidents would, he hoped, be emulated by those to come.

Mr. K. added that the revenue of the asylum now exceeded \$35,000, and that since then two hundred seafaring men were cared for in it, with wise liberality—their moral, intellectual, and spiritual wants, not less their physical wants, being duly provided for. It was, indeed, a noble charity.

After some further remarks upon the comparative apathy which seemed to exist among the merchants of the city in their attendance upon the meetings of the Chamber, and a suggestion of the importance of punctuality, especially on the part of the officers, at all such meetings, Mr. K. announced that the choice of President would now be made.

On counting the ballots it was found that Moses H. Grinnell (Vice-President) was unanimously elected President, J. D. P. Ogden, in like manner, was elected first Vice-President (William H. Macy, who was second Vice-President, positively declining to permit his name to be used,) and Prosper M. Wetmore was chosen second Vice-President.

Mr. Maury was chosen Secretary vice P. M. Wetmore, who declined, and J. J. Palmer was re-elected Treasurer; Messrs. Stewart Brown and James Rayburn were named a committee to audit the Treasurer's accounts; Messrs. R. L. Taylor and C. H. Marshall were reappointed Commissioners of Pilots; Messrs. B. R. Winthrop, P. M. Wetmore, and J. G. King, Trustees on behalf of the Chamber in the Merchants' Clerks' Savings Institution, and the usual committee to visit the Mercantile Library.

Mr. C. H. Marshall then rose, and said he could not permit the meeting to adjourn without asking, in behalf of the retiring President, an expression of thanks for the

punctuality, zeal, and intelligence with which he had discharged the duties of the office. They all had witnessed his course at this Board, and could bear their own testimony to it; but he desired to add, that called as he was to witness his constant and vigilant attention in the affairs of the "Sailor's Snug Harbor," he wished to put upon record his sense of the admirable course in which the President had discharged all the duties of his office. Mr. Marshall offered a resolution in conformity, which, being at once seconded, was put by the Secretary and unanimously adopted.

Mr. J. D. P. Ogden begged leave to ask some similar expression of consideration in behalf of another officer, whose services they were about to lose—services of which they had all felt the value and efficiency. He proposed the resolution:—

Resolved, That the thanks of the Chamber are due to Mr. P. M. WETMORE, Secretary of the Chamber, for his attention, fidelity, and efficiency in discharging the duties of that office.

The motion being seconded by Mr. Charles King, it was put by the President, who said he had great satisfaction in proposing, for no one knew better than he did, as he had more frequent occasion to profit by the services and diligence of the Secretary. The resolution was adopted.

A resolution was adopted expressive of the opinion entertained by the Chamber of the *Merchants' Magazine*, &c., and a copy of the resolution, certified by the officers of the Chamber, and under its seal, was directed to be transmitted to the editor and proprietor. We subjoin the letter of Mr. Wetmore, and an official copy of the minutes, as transmitted:—

CHAMBER OF COMMERCE, New York, May 2, 1842.

DEAR SIR:—It affords me pleasure to be the medium of transmitting to you the accompanying resolutions, which were adopted by the Chamber yesterday, without a dissenting voice. Yours, very respectfully,

PROSPER M. WETMORE, Sec'y.

To FREEMAN HUNT, Esq.

CHAMBER OF COMMERCE, New York, May 1, 1842.

At the annual meeting of the Chamber of Commerce, held this day, the following resolutions were unanimously adopted:—

Resolved, That this Chamber, organized for the promotion of the interests of trade and commerce, should at all times express a just appreciation of individual efforts made for the dissemination of knowledge relating to subjects of commercial utility.

Resolved, That the "*MERCHANTS' MAGAZINE*," edited by FREEMAN HUNT, Esq., is a journal peculiarly adapted to the wants of the mercantile community; that while the Chamber takes great pleasure in recommending the work named to the notice of those connected with the mercantile profession, it cannot but express its high estimation of the valuable services of Mr. Hunt in bringing his journal to its present state of usefulness.

Extract from the minutes.

Attest:

JAMES G. KING, Pres't.

PROSPER M. WETMORE, Secretary.

INTEGRITY OF BUSINESS MEN.

A religion that fails to form honest, upright men—men whose word is as good as their bond—may, in the popular phraseology of the times, be very orthodox, but certainly not very Christian, in the genuine acceptation of that honored name. We too often fall in with men whose reverence for the formalities of the Church and its theological dogmas is so large in its development as to leave little or no space for a scrupulous conscientiousness in their business transactions. Impressed, doubtless, with similar views, a correspondent of the "*Independent*," a religious paper recently commenced in New York, thus discourses of the integrity of business men:—

Not unfrequently we notice in the public prints articles like the following:—"Another case of Oenescence"—"Strange Disclosures"—"Great Defaulter"—and the like, which startle the community usually in proportion to the number of dollars concerned; or, if known, the rank of the individual implicated. A long sigh is heaved by some moral philosophers; the examination, strange!

Such facts, which the history of the business world from time to time discloses, speak

too loudly to remain unheeded of an under-current of deception, selfishness, and dishonesty, which the caving in of circumstances causes to flow out to the light of searching justice; and which, like the rushing lava, carries terror and desolation in its tide.

None who have mingled in society and grown familiar with the dealings of men need be told of the few governed by the principles of strict integrity. Evidence like the above is sufficient to reveal the truth. It is impossible to have aught to do with business transactions without encountering those who, by an air of candor and justice, succeed in duping those of their fellows not yet initiated in the mysteries of deceiving. Rarely is the man found who preserves unsullied a pure and holy integrity amidst the game constantly played around him; and to say, there is a very honest man, is to say there is a very strange man. What wonder man is afraid to trust his fellow, unless he has proved himself pure and incorruptible, like gold that is tried. As it is, a Christian is sometimes afraid of a Judas in his brother.

In the temptations and distractions of business life, those only are safe who act from Christian motives—who seek not their own glory—trust not to their own keeping—but whose constant prayer is, "Let integrity and uprightness preserve me." With all this vigilance and watchfulness there will oft-times wage in their hearts sore conflicts between present worldly interests and the uncompromising principles of right and justice. Could the history of those be revealed who have fallen in the instances alluded to, in some particulars there would be a striking similarity. Many, when lads or young men, were sent forth from homes in some quiet, moral part of our country, all untutored in the plays of life's great stage, with habits unformed, principles not established; or, at the best, weak and wavering. In this plastic state their minds were easily beguiled by adepts in the science of selfish dishonesty. They were carefully, cautiously led in the new dark way; soon, with unaided, hasty strides, they reached the extreme of treachery and disgrace. Now and then a prodigal is restored; but they are scattered exceptions in the general history. Shall we learn nothing from these things? Can nothing be done to stay these evils? It seems almost hopeless to attempt a reformation with those grown gray in deceit; for multitudes of the young let our untiring efforts be made. And let parents who now can gather all their household band around the hearth, ere one departs into the wide world to pave his fortune, be sure that his children are imbibing those principles, and forming those habits, which will abide the fiery hour of temptation. No truly conscientious, Christian parent will allow one of his children to leave him until he feels he will be safe "in the world's broad field of battle." Then might we hope our business men would be all honest men of the *strictest sort*. Let parents, teachers—all who are interested in the welfare and prosperity of mankind—encourage the lad—the young man—to expect that honesty of action will meet its reward. Point him to examples of probity; teach him to discard selfish self—all the glare of cheater—all the love of deceit.

"So shall he stand in his integrity, just and firm of purpose,
Aiding many, fearing none; a spectacle to angels and to men."

A FASHIONABLE SHOP AT LIVERPOOL.

The Liverpool correspondent of the *New York Courier and Enquirer*, furnishes a graphic description of Hausburg's celebrated establishment at Liverpool, which will, we presume, be perused with interest by the mercantile reader.

The American citizen who visits Liverpool will find nothing more worthy of his attention in that busy seat of commerce and wealth than the magnificent and extensive establishment of Mr. Hausburg, in Church-street. The public have heard much of polytechnic exhibitions, and this immense depository of all that is rare, excellent, and beautiful in art and handicraft could not have a better designation. It is an exhibition, or rather a series of exhibitions in itself, in which the lover of the beautiful will find ample materials for entertainment. With its proprietor, whose admirable taste and judgment, and systematic management, are conspicuous throughout the entire establishment, it is justly a subject of pride, and hence he has extreme pleasure in permitting all persons who are interested in the progress of the world's art to visit it and inspect the abundant curiosities which it contains. Among the numbers who are attracted to it for the purpose of making purchases, not a few linger awhile in its beautiful salons or wander through its lengthy avenues admiring the multiplicitous variety of rich, rare, and costly things everywhere arranged around them. It must not for a moment be confounded with those receptacles of low-priced and slop-manu-

factured articles, commonly called bazaars, where there is much glitter and show, much tinsel and gay color, but little solid and substantial value. Presenting infinitely more variety than the best or more extensive of the marts just alluded to, it ranks above them in a degree that will not admit of the slightest comparison in the richness, rarity, beauty, and we may, with propriety, say splendor, of the articles offered for inspection. Indeed, I should not have written the word bazaar in connection with it but for the purpose of preventing any mistake or comparison of ideas in the mind of my readers. It bears about the same relation to a bazaar that a costly jewel, tastefully mounted in fine gold, does to a glittering gewgaw of paste set in Dutch metal. It wants an appropriate designation, for it is so completely unique that no ordinary term will serve to convey to the mind any notion of its extent, appearance, or purposes. I cannot call it a shop or a store without conveying an inappropriate image or false impression. I have seen the magnificent shops of London and Paris, and there are some fine shops, too, in Liverpool, but this establishment is so entirely different from them that the designation would be utterly inappropriate. As to ordinary shops, it is as infinitely superior to them as a palace is to a cottage.

Its chief attraction, however, is the interesting nature of the materials displayed for sale; and it is to these that I would principally direct attention. Of the works of the sculptor,—in bronze, marble, iron, zinc, and alabaster, of the artisan, the lapidary, the goldsmith, in clocks, watches, jewelry, and ornaments of the most exquisite fashion and workmanship, glass, gorgeous in pattern and resplendent in color, cabinet work and curiosities of every description,—the riches of the world seem to have been here deposited, and tastes may be gratified at all prices, from a few cents up to hundreds of dollars. This extensive range of price is, to the attentive observer, not the least curious feature of the establishment, and certainly it is one of the most advantageous to the public, as it enables the least wealthy, as well as those who are blessed with abundant means, to gratify their taste and purchase the best description of articles that can be obtained for any given extent of outlay. I need not say that cheap and low-priced are not synonymous terms. An article is cheap only in relation to its real value. Here everything is cheap, though some articles are exceedingly costly, while others may be obtained for a very trifling outlay. One thing, however, may be taken for granted, everything is good of its kind, genuine, and void of every taint of deception. Let us take the work-boxes and dressing-cases as an example. To this class of goods a very large extent of this spacious establishment is appropriated, and the articles themselves are as numberless as they are various in style, pattern, beauty of fitting, and value. A very elegant article may be procured for a dollar, while those gentlemen and ladies who are blessed with writing cheques *ad libitum* on their bankers, or who have unlimited letters of credit, may obtain a sumptuous piece of workmanship, superb with inland ornaments of pearl, ebony, and rosewood, rich in velvet and gold garniture and mountings, strong, compact, massive, beautiful, furnished with every appliance of luxury and convenience for the toilet or work table, at prices ranging from five hundred to a thousand dollars. There are intermediate articles, equally good, equally durable, and of equal comparative beauty, but of materials less rich, at all prices between the extreme limits, so as to suit the varying means of purchasers.

Having glanced at the description of articles chiefly to be found in this extensive Art Union, I may observe, *en passant*, that in watches, cabinet goods, chandeliers, and jewelry, Mr. Hausburg is an extensive manufacturer. All the best articles of these classes, which he offers for sale, are manufactured on his own premises, and under his own immediate supervision. The clocks, of which I shall have more to say hereafter, are made chiefly at his manufactory in Paris, and he is, I understand, most particular and guarded not to permit any article to bear the sanction of his name, which does not also bear evidences of excellence. Many of the most beautiful patterns in this and in other departments are his own property, and cannot be obtained at any other establishment. His watches are highly esteemed, and, as the greatest care and attention are bestowed on their manufacture, their character is continually advancing. The same may be said of the cabinet work and chandeliers, which are, in their progress, subjected to the most anxious inspection, and many of the patterns of which are equally novel and striking.

I ought to mention that Hausburg's has an European fame, and you may, perhaps, be aware that it is well known to many of our countrymen. It is principally famous for articles of taste suitable for personal and household decoration, particularly bronze, alabaster, and other statuary, chandeliers, Bohemian glass, china, ornamental clocks, plates, and jewelry. These are selected with great care and taste by the proprietor

and his agents, the latter being principally his own kindred in France, Italy, and Germany. All that is novel, rare, and beautiful in these departments are continually transmitted to him, and are at once submitted to public inspection; so that our countrymen may here see, and purchase if they please, the newest creations of the celebrated Parisian artists in bronze, the latest works of the Italians in marble or alabaster, the most novel designs in China and colored glass, and the last inventions of the lapidary in displaying to advantage the dazzling splendors of diamonds, rubies, amethysts, emeralds, and opals. Those individuals who wish to surround themselves, in their houses, with objects of elegance, taste, and beauty, the influences of which cannot be too much insisted upon, never fail to resort to this establishment, no matter what part of the world they come from, for here, and here alone can they find the treasures of art from the whole European continent brought as it were into a focus. With such an immense variety of beautiful objects under review, all contributed by the greatest artists of the world, the man of refined taste is enabled to select such objects as will be suitable to the several sites which he has at his disposal, in keeping with the general arrangements of his apartments, and in consistent harmony with each other. Should he have a taste for bronzes, for instance, as of course he has if he be a man of taste at all, what a choice of tempting groups is displayed before him. It is not too much to say that in no establishment in the world can there be found such an assemblage of works of this description. Beauty is there in all its forms. The voluptuous creations of the Parisian artist, in which the symmetry and grace of the human form are exhibited to perfection, are contrasted by the more spirited and expressive productions of Germany. Allegorical groups, and finely disposed figures commemorative of brave deeds and distinguished persons, are contrasted by the grotesque and laughter-provoking creations of Fratin and other whimsical geniuses, and by finely molded, life-like images of animals. But these elegant productions of the boudoir, the drawing-room, and the saloon can be enriched to any extent that may be deemed desirable, while larger and equally admirable statues, in marble and various metals, offer the most graceful adornments for positions of which the eye takes more commanding observation. Of the exquisitely beautiful miniature statuary in alabaster, the range of choice seems absolutely unlimited. It is not possible to exaggerate either the quantity or beauty of these pure and graceful ornaments, which are as various in size as in subject, resembling each other in nothing save excellence of execution. Models of all the greatest works of the famous masters, with numerous original designs of surpassing elegance, challenge admiration in every direction.

From these beautiful objects attention will perhaps at first be but reluctantly turned to the chandeliers. These, however, will be found to possess their own peculiar elements of beauty, proper to themselves and to the purpose of utility for which they are intended. Those who happen to require them will not fail to discern wherein they are most worthy of admiration, and to choose those which would most largely contribute to the adornment of their apartments. They are of very elegant designs, some being of massive bronze, others of light materials and more graceful form: some are plain, but in strikingly just taste, and others sparkle with lustres and glittering ornaments. It is delightful to see in objects of common utility beauty assuming so many varieties of aspect.

The chandeliers hang in a spacious saloon, which is so filled with the productions of art and genius that you cannot take a step without pausing for admiring contemplation. In the center is a large cabinet filled with the most choice specimens of Bohemian glass, the resplendent colors of which cause it to blaze like a gigantic casket of jewels. Ornaments of all descriptions, of the most charming shapes, shine here in tempting variety. All around are numerous objects rare and beautiful, some mere trifles, of which my countrymen may, if they please, become possessed at trifling outlay, others rich and costly, but still exerting a most alluring influence on the cash which the visitor may have in his pocket. Some of the specimens of cabinet work in this saloon are at once curious and elegant. They are inlaid with various colored woods, so as to represent picturesque landscapes and views of Swiss scenery. The pictures are beautiful in themselves, and are most admirably and perfectly executed. The effect is superb.

An examination of the clocks, which, as before observed, are manufactured by Mr. Hausburg himself, at his extensive establishment in Paris, will be attended with pleasure. Here, again, the number and variety are so great as to be inconceivable by those who have only visited ordinary establishments. Some are mounted in china, some in metals, some in alabaster, some in ebony and gold, while some are transparent

skeletons, in which the whole of the highly finished works can be seen in motion. Some are simple and cheap, some splendid and costly. In all there are some element of beauty, though in those of the least elevated pretensions utility is the chief characteristic, while in the more costly articles that essential quality is united with the highest degrees of richness and ornament which taste and genius could bring into combination. Some of these clocks simply indicate the hours and minutes of the day, but others are more curiously contrived, and keep various records of greater complexity, adjusting themselves to the varying circumstances of time with the most punctual regularity.

There are numerous other objects equally worthy of attention, which such of my countrymen as may visit the establishment will not fail to notice and admire. I will conclude by a cursory allusion to the richest department in this magnificent mart of elegancies. I allude to the department appropriated to jewelry, of which the display is most gorgeous and tasteful. Here, again, you may have the merest trifle of *bijouterie*, or an ornament which dazzles you with the lustre of its sparkling gems; you may part with a few cents, or as many thousands of dollars. There are some articles of jewelry here possessing the most striking beauty, and in the most exquisite taste, the price of which is extremely low. On the other hand, there are rich ornaments, in the design and construction of which the most cunning artisans have strained all their ingenuity and skill; ornaments of diamonds, for instance, which looked like fixed sparks out from solidified sunbeams, the price of which, one would think, to any one less than a millionaire would be absolutely startling. And yet the designs are so beautiful, the patterns so unique, the effects so magnificent, the various gems are made so beautifully to harmonize, and the adaption of each pattern to the peculiar purpose of the ornament is so complete, that to forego the pleasure of purchasing, even though it were to be effected by a stretch a little beyond prudence, seems to have all the virtue appertaining to a successfully resisted temptation, and the party who effects such a measure of self-denial will no doubt secretly applaud himself for his wonderful resolution.

MERCHANTS AND CLERKS.

The advice contained in the following paragraphs, which we take from the *Boston Evening Gazette*, one of the oldest and most respectable journals published in the "Literary Emporium," should attract the attention of merchants and merchants' clerks in all our large commercial cities, where temptations to wrong are ever present, and too often triumph over the virtue of the tempted. It so well accords with the teachings of the *Merchants' Magazine*, that any apology for its republication in this place is considered altogether unnecessary:—

The importance of honesty to a man engaged in mercantile pursuits, and the value of having a good reputation, cannot be overrated; and though the subjects are daily brought up, there is little danger of saying too much if we but look around and see the number of persons who yearly swerve from the path of rectitude, and gradually fall into discredit. That a merchant is daily tempted, who will deny! That the temptations are strong, we admit, and so much the more need has he to take proper caution, and be ever vigilant lest the love of gain tempt him to commit that which in his hours of civil deliberation, he would condemn in himself. We say, the merchant has need of this circumspection; but there is another duty which he owes to society and to himself, and that is, the care and guidance of the young men in his employ. That example is better than advice, is acknowledged; but this is not all. He is bound not only to watch his young men for his own interest, but for their welfare; and though his duty towards them in a measure ceases when they leave the store, yet we think many merchants would be gainers if they were a little more interested in the means, and how their clerks passed their evenings.

During the past two years, several cases have been brought to light where young men, led on little by little in a train of extravagance, have at last been obliged to defraud their employers, in order to sustain their style of living. A public exposition has, in one or two instances, been made not only in Boston, but in New York, and they who have been found guilty have always invariably been the sons of persons resident in the country, who, left to themselves in a large city, have been dazzled by the gayety, and ruined by the profligacy of others who have little by little led them on. It is not a little curious how an employer, who is aware that his clerk is of poor family, and

that the salary he receives is barely sufficient to support him, will retain a young man in his employ when he must be aware, or can readily be informed, that the cost of his mere pleasures exceeds more than he earns. By omitting to take notice of this, he is encouraging the young man to continue his course, and who suffers in the end is well known. Is it not a duty he owes, to check him at once!

It requires but little experience in the world to know that young men who indulge in extravagances, who live as if each day was to be their last, and daily incur debts, will in the end turn out poorly. We have now in our mind's eye several who have been obliged to leave Boston, owing to their extravagance, several young fellows with as good hearts and kind feelings as one would require in a friend, but they paid no attention to the admonition "*live within your means*," and have now gone to other parts, to establish, we trust, characters for rectitude and industry which will efface their youthful follies. There are others in this city who follow in their footsteps, and not a week passes but some new name is added to the list of those who ruin themselves by their own folly. The California fever has carried off many who have left behind them in the persons of tailors, stable-keepers, and apothecaries, sincere mourners.

Advice from us might not, owing to a lack of white hairs, and a score of years more, be received with much attention, but no one will regard the following extract, which we take from letters to a young man, contained in Mr. Henry Colman's *European Life and Manners*, but with the greatest reverence:—

"The character of an upright and intelligent merchant is about the most honorable in our community. Suffer nothing to divert you from this counsel, and remember that nothing is to be put in comparison with a good character. No money can represent its value, and no man can take it from you without your consent; the highest blessing and the best power which a good mind can covet, is that of making others happy. You have that power in your hands, to be used at your pleasure, for how happy can you make your friends by continuing to be, what they desire you should be, and by maintaining always a character above reproach."

Such advice as this should be pondered over, and treasured up. It marks the only path which will lead to an honorable old age, and who is there that does not recoil with horror at the sight of a man, whose years have been prolonged beyond the respect of his friends, and whose hoary head is not only without honor, but a mark of shame! "Remember," continues the writer, "that the highest characteristics of a good merchant, are *honor, honesty, and punctuality*;" and though wealth has its value, and the object of mercantile life is the acquisition of wealth, that it is infinitely more important to be honest, than to be rich, and to maintain the integrity and satisfaction of your own heart and conscience, than to have the riches of the Indies."

THE HONORABLE DEBTOR AND ENTERPRISING MERCHANT.

The following anecdote of commerce, which we copy from the *Providence Journal*, reliable authority, is worthy of a more enduring record than the columns of a daily journal; and, as it is no doubt substantially true, we transfer it to the pages of the *Merchants' Magazine*:—

Literally one of the *coolest* operations that we ever knew in the annals of trade, recently came to our notice from a source worthy of entire credit. New England is said to have but two native products, granite and ice. We have an ice story to tell that is worth bearing. A gentleman long identified with the ice trade, having entered into it as early as 1805, after some twenty-five years of successful enterprise, thought to enlarge his sphere of knowledge and action by entering into other mercantile business. He soon became entangled by his relation to some unfortunate mercantile houses, and found himself a debtor to the amount of \$210,000. This must have given him more of a chill than his ice-houses ever did. But he knew that faint heart never won either fair lady or noble prize. He told his creditors that if they would give him time and not hamper him at all, he would pay the whole, principal and interest. For thirteen years he labored for it, and last year made the closing payment on \$210,000 principal, and about \$70,000 interest. He did it in his old business, as the ice-king of the globe. He sold his cargoes in the great southern ports of the two hemispheres at low prices, kept rigid faith, bought largely the needed storehouses in the various centers of the trade, secured the lands around his ponds, made friends everywhere, and now comes out with an independent fortune, and free of debt. Such was his generous policy that the English residents of Calcutta presented him with a fire-proof stone store-house, as

a token of respect, and to retain him in that market. He takes a very cheerful view of his past misfortunes, and thinks himself, on the whole, better off for embarking in the disastrous business which caused his embarrassments, and yet enlarged his faculties for his old traffic more than enough to make up the loss. Honor to the man who labors to pay his debts, instead of creeping out of his responsibilities through any small hole in the crevices of the law, and allowing his creditors to suffer while he pampers himself over his ill-gotten gains. The above incidents show the power of a cheerful purpose, and the worth of veracity on the one hand, and confidence on the other. But we will not spoil a good story by a long moral.

NEW WHALING GROUND DISCOVERED.

The whaling bark *Superior*, Captain Royce, of Sagharbor, arrived at Honolulu on the 4th of September last, with 1800 barrels of whale oil, which he took in the Arctic seas. In an account of his successful voyage, furnished the *Friend*, Captain Royce says:—"I entered the Arctic ocean about the middle of July, and cruised from continent to continent, going as high as latitude 70°, and saw whales wherever I went, cutting in my last whale on the 22d of August, and returning through Behring's Straits on the 28th of the same month. On account of powerful currents, thick fogs, the near vicinity of land and ice, combined with the imperfection of charts, and want of information respecting this region, I found it both difficult and dangerous to get oil, although there are plenty of whales. Hereafter, doubtless, many ships will go there, and I think some provision ought to be made to save the lives of those who go there, should they be cast away."

During the entire period of the cruise no ice was seen; the weather was ordinarily pleasant, so that the men could work in light clothing. In most parts of the ocean there was good anchorage, from 14 to 35 fathoms, and a part of the time the vessel lay at anchor. The first whale was taken at 12 o'clock at night! It was not difficult "to whale" the whole 24 hours; so light was it that at midnight it was easy to read in the cabin. The whales were quite tame, but quite different from any Captain Royce had ever before taken. He took three different species, one of the largest yielding 200 barrels of oil. The first species much resembled the Greenland whale, yielding 160 or 170 barrels; the second was a species called Polar whale, a few of which have been taken on the North West Coast; and the third was a small whale peculiar to that ocean. The last three whales which were taken yielded over six hundred barrels.

INTERESTING INSURANCE CASE.

A correspondent, residing in Portland, (Me.,) has sent us a brief history of the facts in a decision recently made by Judges Ware and Whitman, in relation to an insurance on property destroyed in the fire on Long Wharf, Portland, in January, 1849:—

It appears, by the statement furnished, that a quantity of flour, stored upon the wharf, was insured at the Ocean Office by the month. During the existence of the policy, the owner sold 100 barrels of flour of the same brand, gave a bill, and received pay for it; but no delivery of any part of the flour was made other than by delivery of the bill and receipt of payment, and the purchaser did not know where the flour was stored, it being understood between the parties that the purchaser could have the flour when he called for it. The owner also stated to the purchaser that the flour was insured, and he would have it when he wanted it.

Some days after the sale, and before the delivery of any part of the flour, the fire took place, which destroyed the whole quantity stored, embracing several hundred barrels. The owner having presented his claim for insurance, the underwriters declined paying for 100 barrels, alleged to have been sold, on the ground of change of interest. In the meantime the purchaser demanded his 100 barrels, pursuant to the terms of sale, which was procured and delivered.

The question now arose as to the liability of the insurers, and was submitted to Judges Whitman and Ware, who, after hearing the parties and their testimony, decided that the transaction between the owner and purchaser did not constitute a delivery of any specific quantity of flour, but only a delivery of a certain quantity of the same brand, which might have been taken from any other place. There having, therefore, been no actual delivery of the specific article insured, the interest therein had not been transferred, and the office was liable for the loss.

THE BOOK TRADE.

- 1.—*Holidays Abroad; or, Europe from the West.* By MRS. KIRKLAND, author of "A New Home," "Forest Life," etc. 2 vols., 12mo., pp. 303 and 332. New York: Baker & Scribner.

Mrs. Kirkland is well known to most of our readers as the author of two or three works descriptive of western life, habits, and manners, and as a contributor to the popular periodical literature of the country. The two volumes before us are the result of some six months' travel in England and on the continent of Europe; and although she has traveled over a beaten route, and describes scenes and places in Europe familiar to almost every preceding traveler, she has contrived to give an interest and importance to her book that renders it quite attractive. Good sense, sound judgment, and discriminating taste, which are a part and parcel of her character, is apparent in every page and paragraph, and we rarely meet with so little, where so much is said, that does not commend itself to our approval. Although she tells the reader that she was obliged to make a compromise with modesty, by secretly vowing to resist all temptation to put anything down in her book which could be suspected of an intent to convey information, properly so called, we believe it contains more really instructive matter than works of higher pretensions, and we think it will be read by those who contemplate a similar route with more avidity and profit than "Murry's Guide-Book," which she *naively* says gives more information than one can use. The publishers deserve great credit for the uniformly handsome style which this, and, indeed, all their publications are produced.

- 2.—*The Adirondack; or, Life in the Woods.* By J. T. HEADLEY, author of "Washington and his Generals," etc. 12mo., pp. 288. New York: Baker & Scribner.

The style of the author of these sketches of life in the woods has been pretty severely criticized, and although a man of an ardent, nervous temperament, he endures it with philosophic fortitude. His success with the reading million may account for his power of endurance in this respect; and that success, on the other hand, may have something to do with the criticisms of his works. An author whose books sell by thousands, and are read with avidity by the people, can well afford to smile at the freedom of the whole tribe of critics. Mr. Headley writes as all authors do—to secure a reading; and, while many fail in this particular, he is successful. His style is full of life and vigor, and if not as chastened as that of an Everett, or as smooth as that of an Irving, it is more picturesque, and embodies as many "thoughts that breathe and words that burn" and meets as effectually the want of the popular mind of the American people. His descriptions of scenery are graphic, and his sketches of life in the "Adirondack region" are lifelike and fresh, and will interest the sportsman and the lover of nature far more than the staid "commonplaces," or the dull and "polished monotones" of the imitators of Addison and Blair, who measure alike their words and their thoughts (if they ever have any that are original) by rule.

- 3.—*Border Warfare.* By WILLIAM W. CAMPBELL. New York: Baker & Scribner.

The several tribes of Indians inhabiting the State of New York at the time of its settlement by the whites, "were distinguished for their prowess in war, as well as for their sagacity and eloquence in council. War was their delight. Believing it to be the most honorable employment of men, they infused into their children, in early life, high ideas of military glory." During the Revolutionary war our State was the scene of some of the most sanguinary conflicts known in Indian warfare, and the deeds of the warriors "are inscribed with the scalping knife and tomahawk in characters of blood." This work gives an interesting history of the border warfare during the Revolution, is replete with thrilling narrative and exciting incidents, and has rescued valuable historical matter from oblivion, essential to a complete history of our State. It is written in a style that at once commends itself to the attention of the reader, and by one who stands high in public estimation as an agreeable and vigorous writer.

- 4.—*Memoirs of my Youth.* By A. DE LAMARTINE.

The Harpers have just issued a cheap and handsomely printed edition of this popular work.

- 5.—*Chemical Technology; or, Chemistry applied to the Arts and Manufactures*. By Dr. F. KNAFF, Professor at the University of Gressen. Translated and edited, with numerous notes and additions, by Dr. EDMUND RONALDS, Lecturer on Chemistry at Middlesex Hospital, and Dr. THOMAS RICHARDSON, of Newcastle-on-Tyne. First American edition, with notes and additions, by Professor WALTER R. JOHNSON, of Washington, D. C. Vol. II. Illustrated with two hundred and forty-six engravings on wood. 8vo., pp. 432. Philadelphia: Lea & Blanchard.

The first volume of this work was published several months since, and noticed in the pages of this Magazine in terms of high commendation. A glance at the present volume only serves to convince us that we were not mistaken in our estimate of its value. "The very rich and copious fund of information," says Dr. Johnson, "contained in the original volume, of which this is a republication, especially in those parts which relate to the two principal topics, glass and porcelain, renders the work useful to the American reader." In the second division of the work, that which treats of the manufacture of alum, green vitriol, and fuming oil of vitriol, will be found a great number of data useful to the American chemist, by an attentive study of which, the manufacturers of our country may cease to rely on foreign supplies for those important articles. In the third group, that embracing clay-ware, pottery, and porcelain, the information will be found no less opportune than that respecting glass. In the branch of manufactures embracing stoneware, bricks, and similar productions of the so-called ceramic arts, many full and interesting details are given, more or less new to American artisans. On the whole, it will, we are persuaded, be considered an indispensable manual for all who are engaged in the manufacture of any of the articles included in this treatise.

- 6.—*Outlines of English Literature*. By THOMAS B. SHAW, B. A., Professor of English Literature in the Imperial Alexander Lyceum of St. Petersburg. 12mo. pp. 435. Philadelphia: Lea & Blanchard.

The author of this work, in the discharge of his duties as Professor in the Lyceum of St. Petersburg, felt the want of a *manual*, concise but comprehensive, on the subject of his lectures, which he has, in our judgment, supplied in the production of the present volume, which appears to be all that it purports to, an outline of English Literature both to the English and the foreign student. It describes the causes and instruments of those great revolutions in taste which are termed "Schools of Writing." The method adopted by the author unites the advantages of conciseness and completeness, and will be found quite valuable as an aid to the reader in forming clear ideas of the main boundaries and divisions of English literature, while the frequent change of topics will render it less tiresome and monotonous than a regular systematic treatise. It is one of the most agreeable and readable treatises on the subject that we have seen; and, in connection with Chambers' admirable *Cyclopedia of English Literature*, the general reader may obtain a pretty comprehensive view of that literature without reading through the ponderous pages of the English poets and prose writers, from Chaucer down to those of the present century.

- 7.—*Dahcotah; or, Life and Legends of the Sioux around Fort Snelling*. By Mrs. MARY EASTMAN. With a Preface, by Mrs. C. M. KIRKLAND. Illustrated from drawings by Capt. EASTMAN. 12mo., pp. 268. New York: John Wiley.

We have the testimony of Mrs. Kirkland, and we want no more reliable authority, that Mrs. Eastman, wife of Captain Eastman, and daughter of Dr. Henderson, both of the United States army, is thoroughly acquainted with the customs, superstitions, and leading ideas of the Dahcotahs, whose vicinity to Fort Snelling, and frequent intercourse with its inmates, have brought them much under the notice of the officers and ladies of the garrison. Circumstances, therefore, placed Mrs. Eastman in a position to portray the Indian life and character, which she has done with a degree of fidelity seldom equalled; and she has succeeded in preserving "from destruction such traits of Indian character as came to her knowledge during long familiarity with the Dahcotahs, and nothing can be fresher or more authentic than her records, taken down from the very lips of the red people as they sat around her fire and opened their hearts to her kindness." "Sympathy—feminine and religious," adds Mrs. Kirkland, "breathes through the pages, and the unaffected desire of the writer to awaken a kindly interest in the poor souls who have so twined themselves about her own best feelings, may be said to consecrate the work." The work is all that it purports to be; and a more valuable contribution to what may be termed the aboriginal literature of America, has not, that we are aware of, been made in a long time.

8.—*The Works of J. Fenimore Cooper. The Spy. Complete in one volume.* New York: George P. Putnam.

We congratulate the American public on the prospect of being supplied with "a new and revised edition of the early and popular works of Cooper, in a form more permanent and acceptable than that of former editions," and we trust the enterprising publishers will not only be encouraged to furnish us with what he is pleased to term "the early and popular works" of the distinguished author, but those of a later date, which have appeared in a style rather too democratic (if bad printing and worse paper is democratic) for our taste. Indeed, the chief complaint we have to make against Mr. Cooper is, that of allowing his recent productions to appear in a miserable whitey-brown dress, a sufficient excuse for any one passing them by unread. The following passage from the publisher's announcement of this edition is just, because true, and, therefore, worth repeating in this place, although we cannot appreciate the apologetical part of it:—

To refer to the censures and counter-censures which have been connected with some of Mr. Cooper's later writings, is a thankless and perhaps, in this place, an impertinent task. But, however fair or unjust may have been some of the pictures of his countrymen's foibles, and however proper or absurd has been their reactive indignation in regard to those pictures, few Americans will call in question either the genius or true patriotism of Fenimore Cooper—the author of the first imaginative work connected with American history, and to this day the most graphic and vigorous delineator of aboriginal characteristics and of life on the ocean. His earlier volumes must live freshly in the memories of thousands of the present generation, who will gladly recall their first pleasant acquaintances with Harvey Birch, and Leather Stocking, and Long Tom Coffin. If any one deserves well of his country for giving her literature a name and a place on the continent of Europe, that man is Fenimore Cooper. Every country in Europe possesses his works in its own language—in France, Spain, Italy, and Germany, there are several different translations, and there are versions also in Danish, Swedish, Russian, and modern Greek. Such works, one would suppose, must possess a vitality which will secure a permanent place for them in American literature.

The first volume is in the same beautiful (uniform) style of Washington Irving's works, now in course of publication by Mr. Putnam; and, if not as widely appreciated and patronized by the American people, they deserve the censure of all Europe.

9.—*Art-Union Journal.* London: George Virtue. New York: George Virtue.

This work passed into the hands of Mr. Virtue, as publisher, on the first day of the present year. It has been enlarged and improved; if, indeed, improvement could be made on the high standard of excellence which characterized the previous volumes. The two numbers (March and April) now on our table contain six engravings on steel, in the highest style of the art, as follows:—The Chapeau de Brigand, from the picture in the Vernon Gallery; the Brook of the Way, from another picture in the same gallery; Lavina, from the statue in marble by B. E. Spence; the Fall of Clarendon, from the picture in the collection of the Right Honorable Lord Northwick; the Scheldt, Texel Island, from a picture in the Vernon Gallery; and part of the West Frieze of the Parthenon, as restored by Mr. John Henning. The illustrations of passages from the poets, are the most highly finished engravings on wood that we have ever seen. Indeed, every number of this work is copiously illustrated with engravings, each of which may be considered a model of its kind. The literary department of the work is in perfect keeping with the excellence that pervades the pictorial. We are pleased to learn that this work is receiving in this country a degree of encouragement corresponding, in some measure, with its unquestionable merit; and when our people become better acquainted with its character, we are persuaded that its circulation here will equal that bestowed upon it by the more matured taste of our transatlantic brethren.

Since writing the above notice we have received the May number, in its illustrations a perfect gem. The frontispiece, "The Valley Farm," from a picture in the Vernon Gallery, is one of the most highly finished specimens of line engraving we have ever seen. The engraving from the statue, in marble, of Queen Victoria, and the "Pawn Fishers," in the same number, are executed in the highest style of the art. The literary contributions to the present number are in keeping with the pictorial illustrations.

10.—*Adventures in the Libyan Desert and the Oasis of Jupiter Ammon.* By BAYLE ST. JOHN. 12mo., pp. 244. New York: George P. Putnam.

Mr. St. John started for the scenes he describes in this volume in 1847, in company with three colleagues, all residents in Egypt, and acquainted with the Arabic language. They penetrated far into the Libyan Desert, and the results of their exploration, or adventures, are given in the present work with a tolerable degree of minuteness, without its too frequent appendage—tediousness. The descriptions of scenery appear to be graphic, and the accounts of the habits, manners, customs, &c., of the Arabs, are as interesting as they are instructive.

- 11.—*The Incarnation, or Pictures of the Virgin and her Son.* By CHARLES BEECHER, of Fort Wayne, Indiana. 1 vol. 12mo. New York: Harper & Brothers.

The design of "The Incarnation" is to invest the narratives of the history of our Lord with a new freshness, and something of the interest which, to many, they have lost from a long-continued familiarity with their language. To effect this, the author presents us a series of pictures which are among the most striking and beautiful productions in literary art; and it will surprise and gratify the student who is familiar with Biblical criticism to see how completely it embodies all that is known from the Evangelists, and that may be justly deduced from historical, ethnological, and geographical learning. We commend the book to all our readers as quite equal, in dramatic and picturesque interest, to any composition that, for a long time, has come from the American press.

- 12.—*Benjamin Franklin: his Autobiography, and a Narrative of his Public Life and Services.* Embellished with numerous designs, by CHAPMAN. 1 vol. 8vo. New York: Harper & Brothers.

We have heretofore spoken of this work, from the press of the Harpers; and now that we have the last number before us, we repeat the expression of our conviction, that it is a triumph of art well worthy its distinguished subject. We commend it to our friends as peculiarly deserving of their patronage; for it is as cheap as it is elegant, and therefore accessible to all. The excellent moral teaching that pervades the writings of the great philosopher must ever commend them to the domestic circle as a treasury of good instruction as well as interest.

- 13.—*Last Leaves of American History; comprising Histories of the American War and California.* By EMMA WILLARD. pp. 230. New York: George P. Putnam.

Mrs. Willard has brought together, in a connected form, the most prominent events connected with the history of America, commencing with 1840 and closing with the commencement of 1849. It includes, of course, the administration of Tyler and Polk, and the stirring events that have transpired during the two administrations. It is written in a clear and scholarly style, and the facts are presented in a condensed, but singularly comprehensive form.

- 14.—*History of King Charles II. of England.* By JACOB ABBOTT. 12mo. pp. 208. New York: Harper & Brothers.

This, the sixth volume of Mr. Abbott's highly interesting and useful series of histories, possesses the same attractions as the preceding ones. The subject, like his former subjects, is well chosen, and the book is written in the author's customary simple and beautifully transparent style. We look upon the production of this series as one of the most useful enterprises of the day—one which will be of incalculable benefit, not only to the young, for whom they are, perhaps, more especially designed, but also to those of riper years. We recommend the perusal of the present volume to all who take an interest in what may, in many respects, be considered the most important reign in English history. The book is tastefully bound, and ornamented with various engravings, and a gorgeously illuminated title-page.

- 15.—*My Uncle the Curate.* By the author of "The Bachelor of the Albany." New York: Harper & Brothers.

The author of the renowned "Bachelor" is as humorous and witty as ever, and we think that, in many respects, his present production is, perhaps, an improvement on its predecessors. It forms the 128th No. of Harper's Library of Select Novels—a series comprising some of the most able and interesting works of fiction in the English language.

- 16.—*Agnes Morris; an American Tale.* 12mo. Harper & Brothers.

This is a delightful story of the domestic circle, evidently written by a lady. Its perusal cannot fail to entertain, instruct, and please.

- 17.—*The Happy Home. Affectionately inscribed to Working People.* By the Rev. JAMES HAMILTON, D. D. New York: Robert Carter & Brothers.

Those who have read the author's "Life in Earnest," "Harp on the Willows," and admired them, will not fail to read, and be equally gratified with this collection of domestic stories, designed to interest and improve the social circle of "working people." It is a very handsomely printed volume, beautifully illustrated with engravings that reflect credit on the skill of the artist.

- 18.—*Chemical and Pharmaceutical Manipulations: a Manual of the Mechanical and Chemico-Mechanical operations of the Laboratory, containing a complete description of the most approved Apparatus, with instructions as to their application and management both in Manufacturing Processes, and in the more exact details of Analysis and accurate Research. For the use of Chemists, Druggists, Teachers, and Students.* By CAMPBELL MORFIT, Practical and Analytic Chemist, author of "Applied Chemistry," etc. Assisted by ALEXANDER MUCKLE, Chemical Assistant in Prof. Booth's Laboratory. With Four Hundred and Twenty-three Illustrations. 8vo. pp. 482. Philadelphia: Lindsay & Blakiston.

The contents and character of this work are sufficiently indicated in the copious title, as quoted above. It is designed to render chemistry "a system illustrated and proved by experiment, furnishing the rules for those mechanical operations by means of which chemical changes are produced, observed, and estimated." Although the student cannot become an adept in the art solely by the aid of written directions, this volume certainly communicates much that is calculated to lighten labor, and facilitate him in the attainment of skill and accuracy. It is so arranged as to lead the uninitiated step by step into the mysteries of manipulations; presenting at the same time, plainly and clearly, the information best calculated to give familiarity with the construction, arrangement, and uses of apparatus. The author gives, in a familiar but clear style, the details of all the manipulations of the laboratory, including the improvements of the present day, and illustrates his descriptions with numerous beautifully-executed and expressive wood-cuts, or drawings. No expense, we are informed, has been spared in endeavoring to make this book the substitute for all others on the same subject. The work is highly commended by Professor J. O. Booth, a distinguished practical and analytic chemist of Philadelphia.

- 19.—*Chemical Analysis, Qualitative and Quantitative.* By HENRY M. WOAD, Lecturer on Chemistry at St. George's Hospital; author of "Lectures on Electricity," "Lectures on Chemistry," etc., etc. With numerous additions, by CAMPBELL MORFIT, Practical and Analytic Chemist; author of "Chemical and Pharmaceutical Manipulations," and co-editor of the "Encyclopedia of Chemistry." With illustrations. 8vo., pp. 572. Philadelphia: Lindsay & Blakiston.

The present work was originally prepared by Mr. Woad as one of a series of chemical treatises for the "London Library of Useful Knowledge." The care and fidelity with which that distinguished chemist performed his laborious task, seems to have left little more to be done by Mr. Morfit, the American editor, than to make such additions as are called for by the latest investigations in chemical analysis. These appear to have been supplied, and the work comes before the American chemist as a complete manual both of Qualitative and Quantitative Analysis in organic and inorganic chemistry in all their details. The works of Mr. Morfit are highly esteemed by both practical and scientific chemists. The present volume is copiously illustrated with appropriate engravings.

- 20.—*The Laws of the common Carrying Trade; also of Marine, Fire, and Life Insurance. Rendered plain and familiar for popular use.* By J. V. LOOMIS, Counselor at Law. New York: M. Starbuck & Co.

This is a work of real merit, which will not fail to be appreciated by all men of business, and highly prized. As a digest it is brief, accurate, and clear; but a critical perusal shows that it is much more. The learned author has taken up these subjects of law, and with signal ability discussed them as a science. The reader is not solely informed as to a series of arbitrary rules, but is educated in the elements and principles of the law, and made to see and comprehend its reasons and necessity. The writer places before the mind the legal institution, and states and demonstrates the various rules as inevitable results.

- 21.—*The Gold Mines of Gila. A Sequel to Old Hicks, the Guide.* By CHARLES W. WEBBER. 12mo., pp. 264. New York: Dewitt & Davenport.

Mr. Webber says, in the preface to this volume, that he wishes it to be distinctly understood that he is in earnest in this book; and furthermore, that, to the best of his knowledge, every syllable of it, bearing either directly or indirectly (of which last there is a great deal) upon the general subject, is true, *literally*. The scenes and incidents recorded were for the most part derived from the author's personal observation and experience, and he has availed himself of all accessible antiquarian, legendary, and official information. It is, on the whole, an interesting, readable book, and we presume the more important parts of it are reliable.

- 22.—*The Hand-Book of Hydropathy, for Professional and Domestic Use. With an Appendix, on the best mode of forming Hydropathic Establishments. Being the result of twelve years' experience at Graefenberg and Freywaldan.* By J. W. WEISS, formerly Director of the Establishment at Freywaldan, lately of Stanstead-Bury House, Hertfordshire. From the second London edition. 12mo. pp. 402. Philadelphia: J. W. Moore.

A number of works have appeared in Germany, England, and in the United States during the last ten years on the subject of hydropathy. Germany, in particular, has been overrun with books explanatory of the beneficial effects of cold water, written with the express object of gaining popularity to this new system, or designed to instruct the public in the modes of applying cold water in diseases, and in its use and action as a prophylactic remedy. But few, if any, are more deserving of confidence than the present work of Dr. Weiss, whose advantages of acquiring a knowledge of the practice are scarcely less than those of Vincent Pressnitz, the founder of the system, and the first successful practitioner. The author practised allopathically prior to 1829, receiving the year previous the prize for a dissertation on the use of narcotic medicines in certain diseases from the University of Leipzig; but, becoming acquainted with the water cure, he abandoned the use of all drugs, and for more than twelve years past has never resorted to a single pharmaceutical preparation. In conjunction with Pressnitz, he marked the progress of this mode of treatment from its earliest infancy to its present stage of development, and its present state of expansion. At his establishment at Freywaldan, the most frequented in Germany after that at Graefenberg, he enjoyed rare opportunities of enlarging the sphere of his observation on the action of water in disease, and drew his own conclusions on the whole system of treatment. The present volume, the result of Dr. W.'s experience, is purely practical, and embraces only that which is already known of hydropathy, according to his own absolute experience, and the treatment which he found most advantageous in practice in certain diseases. To those who desire to learn something of hydropathy, we can recommend this work as one of the most reliable that has yet been published, and we have seen and read almost every one on the subject in our language.

- 23.—*Mysteries of City Life, or Stray Leaves from the World's Book; being a series of Tales, Sketches, Incidents, and Scenes, founded upon the Notes of a Home Missionary.* By JAMES REES, author of the "Philadelphia Locksmith," the "Nighthawk Papers," etc. 12mo, pp. 408. Philadelphia: J. W. Moore.

This volume contains some forty tales and sketches, for the most part founded on the daily occurring incidents of city life. The writer seems to have made himself familiar with society in its ever-varying aspects of light and shade, and has portrayed, with vividness and with apparent fidelity, the miseries of poverty and vice as found in all our large commercial cities and towns. Some of his sketches have a painful interest, and most of them are affecting; but from what we have seen, and heard from those whose opportunities have led them to investigate the subjects embraced in these sketches, we believe the work contains but little that may not be taken as a faithful delineation of events daily transpiring in our midst. We commend the work as well calculated to enlist the sympathies of the philanthropist, and stimulate him to nobler efforts in behalf of his suffering, poor, and misguided fellow men.

- 24.—*The Hill Difficulty, and some Experience of Life in the Plains of Ease. With other Miscellanies.* By GEORGE B. CHEEVER, D. D. 12mo, pp. 383. New York: John Wiley.

This volume is divided into three parts: the first consists of allegorical and imaginative papers; the second, descriptive and meditative; and the third, critical and speculative. Besides the "Hill Difficulty," which comes under the first division, we notice the allegory of "Deacon Giles' Distillery," which cost the author a libel suit and imprisonment in the Salem jail. If not a remarkably bold and free thinker, Mr. Cheever is certainly a clear and vigorous writer, and is far more effective in his ingenious denunciations of rum-making and rum-selling than in his illogical attempts to sustain that relic of barbarism—the gallows. His allegories are very effective, and his descriptive powers interest us far more than his logical, which latter would do very well were it not chained to the car of some untenable theological dogma. We fully agree with Mr. Cheever when he says, as in the preface of the present volume, that it is a Christian duty to use every opportunity and occasion of circulating Christian thoughts; all such thoughts in our world occupying a space that might otherwise be forestalled and filled with evil.

- 25.—*I. The Old Man's Home.* With engravings from original designs, by WEIR. *II. The Shadow of the Cross: an Allegory.* With engravings from original designs, by CHAPMAN. *III. The Distant Hills: an Allegory.* With engravings from original designs, by CHAPMAN. *IV. The King's Messengers: an Allegorical Tale.* By the Rev. WILLIAM ADAMS, M. A., Fellow of Merton College, Oxford, author of the "Old Man's Home," "Shadow of the Cross," "Distant Hills," etc. *The Combatants: an Allegory.* By EDWARD MONRO, Perpetual Curate of Harrow-weald, etc. From the London edition, with engravings executed by B. F. CHILDS, from original designs by DARLEY. 5 vols. New York: General Protestant Episcopal Sunday School Union, Daniel Dana, Agent. Pudney & Russel, Printers.

The "fine and useful arts" have combined to produce five as beautiful volumes, in all that relates to the material of book-making, as we have ever seen; that is, the designers of the illustrations, Darley, Weir, and Chapman, and the printers, Pudney & Russel, and the paper-maker, have each and all, in their own departments, furnished specimens of genius or skill that do them great credit. But that is not all; their labor has been well bestowed, inasmuch as the productions, in a literary, moral, and religious point of view, are worthy of the beautiful form that introduces to the visual eye, and by that avenue, presents through the medium of the artistic allegory, their spiritual and moral lessons, to the unseen soul. The Christian graces and virtues, as understood by a scholarly divine of the English Episcopal Church, are illustrated in the form of pleasing, fascinating allegories, and although these volumes are designed by the Episcopal Sunday School Union for the children of that communion, we are strongly inclined to the opinion that they may be read with pleasure, not unmixed with profit, by all good children, and by some more advanced in life, who belong to other sects, or to the great Church of Humanity. This last remark will apply with peculiar force to the "King's Messengers," one of the series of allegorical tales which brings forward, prominently and distinctly, the single Christian duty of beneficence, which, in our judgment, joined with charity, as explained by St. Paul, embraces all the social, and moral, and Christian virtues and graces.

- 26.—*Manual of Ancient Geography and History.* By WILLIAM PUTZ, Principal Tutor at the Gymnasium of Dusen. Translated from the German. Edited by the Rev. THOMAS KERCHEVER ARNOLD, M. A., Rector of Lyndon, and late Fellow of Trinity College, Cambridge. Revised and corrected from the London edition. 12mo., pp. 396. New York: D. Appleton & Co.

The present volume contains a clear and definite outline of the history of the principal nations of antiquity. To render it still more clear, the American editor has added a concise geography of each country, and without entering into minute details, all the important features of its physical aspect appear to have been carefully marked. The Appletons deserve great credit for their efforts to promote the educational movement of the times, by the publication of the most improved and valuable works in every department of school and college learning. Not only are their publications prepared with great skill and care, but they are printed and published in the most substantial and beautiful style.

- 27.—*The Art of Rhetoric; or, the Elements of Oratory, adapted to the Practice of the Students of Great Britain and Ireland. Methodically arranged from the Ancient and Modern Rhetorical Writers, &c.* By JOHN HOLMES, late Master of the Public Grammar School in Holt, Norfolk, (England.) To which is added, Quintilian's Course of Ancient Roman Education, from the pupil's first elements to his entrance into the School of Botany. A new and carefully corrected edition, in two books. Entirely remodeled, for the use of Schools, Colleges, &c., by JOHN A. GETTY, A. M. Philadelphia: Cary & Hart.

We have never seen in so small a compass so complete a system of rhetoric and education, and we are not surprised that it has already been favorably received by those every way competent to pass upon its merits. It will, when its merits are fully understood, take a very high, if not the highest, rank among the many works on education heretofore published.

- 28.—*Frank Fairleigh; or, Scenes from the Life of a Private Pupil.* Illustrated by GEORGE CRUIKSHANK. London: Arthur Hall & Co. New York: George Virtue.

We have here, in part one, thirty-two pages of letter-press, extremely beautiful, the commencement of a story rich in graceful humor, with two capital illustrations from that inimitable artist, Cruikshank.

29.—*A Practical Treatise on the Law of Replevin in the United States, with an appendix.* By P. PEMBERTON MORRIS. Philadelphia: James Kay, Jr., & Brother.

This work originated from the difficulty which the author experienced on an occasion in which he was called upon to use the action of replevin. Replevin, which, in early times, was solely a remedy given to controvert the legality of a distress, has come now to be a remedy for the unlawful detention of personal property, and by means of which the title to may be tried, though entirely disconnected with distress. There was no American work on this subject. The author has been a diligent seeker at the fountains of his subject in the English Law, and following the streams which have run from them, he has traced the courses of some of them through the different States, but more particularly that stream which flows through his own State of Pennsylvania. We believe, however, that this contribution to the law learning of our country will be found valuable in most of the States, and will prove an important addition to the library of the American lawyer.

OUR FIRST DECADE COMPLETED.

THE present number (June) completes the TWENTIETH semi-annual volume, and the tenth year of the existence of the *Merchants' Magazine and Commercial Review*. The occasion suggests remarks which we should be glad to indulge in, if we could do so without egotism, or without trespassing upon the patience of our readers. We think the work, as our knowledge has increased, and our means of information have extended, evinces improvement and progress. Our efforts will not be relaxed; and we only need a continuance, and such an increase of patronage as we may merit, to go on enlarging and extending the sphere of its influence and usefulness. We give nearly a third more matter than when we first started; and we intend, with the forthcoming volume, still further to increase the quantity, and at least maintain the standard of its excellence. Although we have been more handsomely treated by those whom it was our hope to please than was anticipated in the beginning, yet the promotion of the work depends, in a great measure, upon the patronage we may receive; and although our journal is designed for merchants in the largest acceptation of the term, we are gratified to know that it has been found almost equally useful to, and as highly appreciated by, statesmen and lawyers. No effort will hereafter be wanting on our part to render the work equally acceptable to all classes of intelligent men in any way connected with trade and commerce, in all their bearings upon the legislation of States and Nations, and upon the development of the great industrial interests of man and society, at home and abroad. With new sources of information, and an extending domestic as well as foreign correspondence, and other facilities, which ten years' untiring devotion to a single object have enabled us to make available, we are persuaded that our journal will continue to maintain, in even a greater degree, its character as a perfect *rade mecum* to the Merchant, the Manufacturer, and the Banker, as well as to the Statesman, Commercial Lawyer, and the Political Economist, and, in short, to all who desire information on all subjects falling within the wide scope embraced in our plan, as in a measure developed in the *twenty* volumes now in the possession of the public. The demand for complete sets of our Magazine is, we think, pretty conclusive evidence of its standard value; and we have no hesitation in saying, that in no single periodical or other publication is so large an amount and variety of authentic information on the same subjects to be found.





